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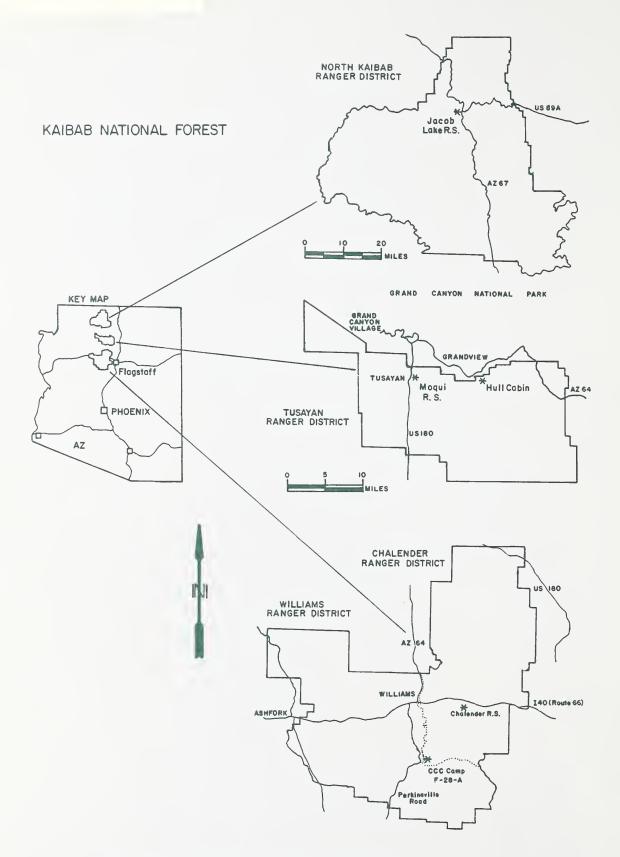
Report No. 10



Cultural Resources Management

People and Places
Of The Old Kaibab





Map 1. Kaibab National Forest's four Ranger Districts with locations noted in articles.

Printed September 1990.

People and Places Of The Old Kaibab

Articles By

Clyde P. Moose Teri A. Cleeland Patrick J. Putt Will Mace

Cultural Resources Management Report No. 10

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> > September 1990

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attention of the Kaibab archeology staff by former Tusayan District Ranger Tom Chacon, who had received them earlier from the family. The families of Clyde Moose and Will Mace cooperated enthusiastically, sharing both information and materials with us on short notice. John Hanson and Larry Lesko gave advice, support, and encouragement. This work benefits primarily from the efforts of Clyde Moose and Will Mace, who had the foresight to leave us their memories, which we now pass on to you.

INTRODUCTION

A national forest represents more than a physical landscape; it is more than timber, riparian land, range land, or mountain meadows. It also is a political, economic, and cultural landscape. The evolution of a national forest is as much a story of human history as it is an account of natural history. The formation of the Kaibab National Forest illustrates this interplay of the physical and human landscape.

During the latter decades of the nineteenth century, the region which now encompasses the Kaibab National Forest in northern Arizona laid directly in the path of America's manifest destiny. A growing nation and an expanding economy required land and raw materials. From the American capitalists to the simple homesteader, dreams of success were fueled with resources extracted from the public domain. lumberman, homesteader and entrepreneur all came to the region to harvest the forest's plethora of natural wealth. By the late 1880s, northern Arizona was transformed from wilderness into an industrial colony and transportation corridor to the Pacific. Resources extracted from the area supplied the needs of the Southwest's railroads and mining camps, as well as building materials for the East and southern California. However, prosperity and improved commerce came at a high Natural resources were exploited to near exhaustion within a few years. Prior to creation of the forest reserves, the road to northern Arizona's economic success was blazed through a forest of stumps, slash piles, and overgrazed and pulverized soils.

The nation's deteriorating environment did not go unnoticed. A movement arose during the 1870s in which a small core of conservationists fought to set aside part of the public domain to promote

scientific forest management. The issue of conservation brought about a clash of competing needs and principles which pitted pioneer against politician and industrialist against scientist. The result of this contest was an 1891 amendment to the federal land laws. The legislation entitled the "General Land Law Revision Act of 1891" empowered the President of the United States to set aside woodlands in the public domain as "Forest Reserves." Now known as the "Creation Act of 1891," this pioneering federal law planted the seed which has grown into today's national forest system.

The 1891 Creation Act was enacted without fanfare. Indeed, Congress seemed ignorant of the far-reaching power it had conferred upon the President. In truth, the Creation Act had little real meaning until the 1897 Organic Act brought its conservation ideals to fruition. Still, in that 1891 spring northern Arizona lumbermen, ranchers, and businessmen believed they were a safe distance from the reigns of government. Dismissed as a fad, local residents thought it inconceivable that the politicians in Washington would lock up resources so desperately needed by the young territory. The foundation of American frontier expansion had always been based upon subduing the wilderness, not conserving it. But conservation proved to be more than a passing political fancy. On February 20, 1893, President Benjamin Harrison signed a proclamation establishing the Grand Canyon Forest Reserve. With the stroke of a pen, Harrison set in motion an evolutionary process destined to mold landscape and human need into today's Kaibab National Forest.

William McKinley set aside additional lands in northern Arizona as the San Francisco Mountain Forest Reserve in 1898. In 1905, forest reserves were transferred from the Department of the Interior to the Department of Agriculture. The Forest Service came into being with Gifford Pinchot as the Chief Forester. In 1908 the area north of the Colorado River became the Kaibab National Forest headquartered in Fredonia, Arizona. The Tusayan National Forest, with headquarters in Williams, was established south of the Colorado River in 1910 (the lands had been part of the Coconino National Forest from 1908).

The present-day forest boundaries resulted from several administrative changes. The creation of Grand Canyon National Park in 1919 substantially reduced the size of the Tusayan and Kaibab. In 1934 the two forests were combined to create today's Kaibab National Forest. Since then, the forest has administered over one and a half million acres of land, divided into four ranger districts. The Williams and Chalender Districts surround the city of Williams, the Tusayan District is adjacent to the southern border of Grand Canyon National Park, and the North Kaibab District lies north of the national park's north rim boundary.

Early forest officials were met with open hostility by area residents. One turn-of-thecentury local newspaper argued that the best way to oppose the government would be "to hang these U.S. tree agents to the trees that they had come to save."

Rangers were also poorly paid and overworked. Guidelines in the 1908 Use Book reveal Gifford Pinchot's high expectations: "A ranger of any grade must be thoroughly sound and able-bodied, capable of enduring hardships and of performing

severe labor under trying conditions. He must be able to take care of himself and his horses in regions remote from settlement and supplies. He must be able to build trails and cabins, ride, pack and deal tactfully with all classes of people. He must know something of land surveying, estimating and scaling timber, logging, land laws, mining, and the livestock business." All of this to be done for \$75 to \$95 salary per month, from which the ranger had to buy his uniform, support himself, and maintain a string of horses.

What would compel a young man to seek such a position? Jobs were scarce, and the rugged outdoor life of the ranger appealed to many. Most had an idealistic desire to carry out the Forest Service mission of managing resources for the "greatest good for the greatest number in the long run". Eventually, public opinion shifted to accept the dedicated and well-qualified Forest Service rangers, and hysteria over government regulations waned.

As the first century of the national forest system draws to a close and a new century begins, it is appropriate to pause and reflect upon the conservation ideals embraced by these Forest Service pioneers. We can also celebrate the rich legacy they left in our care -- not only the forests and meadows, but also the ranger stations, lookouts, trails, roads, reservoirs, and other reminders of the past. What follows is a glimpse into those early years, the people and places of the old Kaibab, seen in part through the eyes of men who were there.

Teri A. Cleeland Patrick John Putt

MEMOIRS of CLYDE P. MOOSE

Clyde Moose wrote those memoirs in 1972 when he was 78 years old. They begin with his Texas childhood, dwell on his Porest Service career in Arizona, and end with his retirement in Texas. The version printed here omits about half of his story to focus on his years on the Kaibab National Porest.

Moose was born in 1894 in Agnes, Texas. His father was a doctor, but the family also operated a ranch, rented out farm land, and owned a store. The Moose family had four children: Frank, Nola, Ray, and the youngest, Clyde. His memoirs begin with his childhood, growing up on the ranch. He then had a short stint in the National Guard where he "learned to 'soldier' on the job; that is, take it easy, do as little as possible, volunteer for nothing and not worry if jobs were never completed."

We join the narrative when Clyde meets his future wife, Ruby Taylor.

I never considered myself a "ladies man." I suppose it was because they didn't seem to care too much for me. In most cases, I would rather be out working with livestock. I was about 20 years old by now and liked the girls pretty well and had a few dates but never got serious about any certain one. However, I had a close friend who had a girl in Poolville he thought a lot of. She also had a friend, Ruby Taylor, that they wanted me to meet. Poolville had always been noted for its pretty girls, so a blind date was arranged and we meet at a community ice-cream supper at the public square in Poolville. She struck me as about the most lovely person I had ever met. I took her home in my buggy and made a date for the next day to take her to the Sunday Afternoon "something or other." I have never been able to remember what we went to. My term in the Dallas school may have given me a little confidence. Anyway, I kept going back to see this little curly haired, brown-eyed girl until late summer when I went to west Texas to work on a cow ranch.

My cousin, B. H. Blakenly, who lived in Midland, Texas, owned the ranch about 20 miles north of Odessa, in Ector County. He met me at the train and wanted me to spend the night at his house in town, but I wanted to get to the ranch so we drove the 40 miles to it that night. The road was just two ruts and we had to keep a sharp watch for cattle sleeping on the road. B. H. spent several days at the ranch to get me oriented, then drove back to Midland and left me on my own. I had a telephone and could call in for advice or instructions or to give him a grocery order when he was coming out.

I lived alone and did my own cooking, such as it was. Sometimes, as much as three weeks would go by without my seeing another person. I put in a lot of evenings writing to Ruby and she wrote me quite often. I liked my work which consisted of

greasing and repairing windmills, riding fences, looking after the cattle or helping the neighbors. Everyone whose ranch adjoined this one was considered a neighbor and we all helped one another.

Most all the ranches had only one man that stayed there all the time. During roundup time the owners would come out and help and we all worked together. I always enjoyed the roundups. It was an opportunity to be with others and there was always some excitement. When the cattle were thrown together the strays, if any, were cut out and the calves branded first outside the corral so as to get the proper brand on the calf. the balance were driven into the corral, the calves were held in the corral and the cows driven back out. These calves were all branded in the same iron. They were driven into a small pen and a fire built in the center and the calves crowded into a corner and "flanked" without any roping. It was very fast and several hundred could be branded in an afternoon.

On my first roundup, while branding strays, a large frisky calf was roped and dragged out near me and I undertook to flank him. I had done a lot of flanking before but I suppose I was a little awkward and the men started telling me how. I tried to do it their way and, as a result, the calf got me down, kicked me in the face and ran away. I was embarrassed and thought the roper might get mad. But he was a swell guy and said, "That's all right, I'll get him again." It wasn't long until I got on to it and could do about as well as anyone.

B. H. owned about 16 sections of land and about 1,000 Herefords. His father-in-law, Fred Cowden, had his ranch headquarters about two miles away and 3 or 4,000 black Angus cattle and kept at least two men all the time. I liked to help them

work during roundup, there was always a big bunch of cowboys and more of a stir. These black muleys were hard to work and the calves hard to handle.

Fred Cowden was one of three brothers who left Palo Pinto County in the early days and settled around Midland. He, like the others, was thrifty and hard working and, as a result, accumulated a lot of property. His "M Bar" ranch was a large one and his cattle and improvements were the best. It was said he made it by cutting down expenses but I know he did not cut down on expensive fences, corrals, etc. Some of his men told that when they were talking to him on the telephone he never asked them if they needed any groceries. He would just say he would be out a certain day; they would have to tell him what they needed to eat.

Their conversation would go something like this, "I'll be out Sunday." The men would say, "You better bring out some flour, sugar, bacon, potatoes, beans and dried fruit, and you might bring some canned goods -- corn or something like that." He would reply, "No, there has never been any canned goods on the M Bar yet and we are not going to start now." Then when he got there he had most always "forgotten" to bring the sugar or something the men needed but could get along without.

One day during roundup we got in a little early and the cowboys were sitting on the porch waiting for the cook to call them to supper. Mr. Cowden sat and listened to the talk for a while then started rubbing his hands together and said, "Well boys, while we are waiting for supper, lets go down and fix that corral gate; when it is left unlatched it swings shut and I want it to swing open. We don't want any cattle trapped in there. He never liked for his men to waste daylight. I could see his side and admired him a lot and he was always good to me.

B. H. had one of the roughest horses I have ever ridden, he would shake you to pieces just going in a walk and when in a trot it seemed every joint in your body was coming apart. He traveled with his head up in your face. When we used to wrangle other horses he would run right down through the middle of them, apparently trying to get your knee cap kicked off. B. H. put me on the first day and we made a long ride. I had ridden very little the past two or three months and the old horse made me sore, every muscle seemed they would tear every time I moved. I didn't complain because I thought it was some kind of a test.

After roundup was over and he had helped the neighbors, work slacked up a little. It was near Christmas and I had been writing Ruby all this time, so I took a week off and came home and put in all the time I could with her. My parents were still living in Dallas and operating a rooming house. I went to see them while on vacation. Dad was cleaning a room vacated by someone and among the junk was a large rifle shell of the old Army type. I asked Dad for it because there was an old gun at the ranch that this shell might fit, and I may be able to kill a covote. When I returned I tried it for size and, sure enough, it fit. laid it up near the gun and a few mornings later \boldsymbol{I} was getting ready to go to work and the chickens were getting off the roost and making a funny noise. I looked out and saw a coyote looking them over with the idea of selecting a good one. I quickly loaded the big gun and took aim out the kitchen door and let him have it. He dropped and never kicked.

That winter was spent looking after the cattle, cutting ice on the water troughs, repairing windmills and riding fence. B. H. came out for about a week and brought some poisoned wheat and we poisoned a lot of prairie dogs. I also fed cotton seed cake to some of the cattle. In the fall before cold weather I hauled several tons of "cake" from Odessa with wagon and team.

I remember on entering Odessa the road went by the County jail. This was a little two room affair made by nailing two by four boards together. It was up off the ground on blocks. Someone had chopped the lower corner off the building leaving a hole the right size for a man to crawl through. The other room was apparently all right but the door was always standing open and swinging in the wind. There was one little hotel and eating place and one wagon yard and livery stable combined.

I always put my horses in the wagon yard for the night. One morning I went to get them and the yard was full of wild horses running loose. They would run to a far corner and turn and snort then run to the other side of the yard. I met a long-haired cowboy coming out of the place when I entered. The man running the place said, "You better stick around awhile, we are going to have some fun." I asked, "What is it?" He said, "That old long-haired boy is going to hook a couple of these brones to a buckboard and drive them home." I told him, "I would like to see it but I have to get back to the ranch." I have wondered all these years how the young man came out.



Figure 1. Clyde P. Moose as a young man. Photo courtesy of Charles G. Wright.

In the spring we went through another succession of roundups and driving cattle to Odessa to ship. Large herds of J A L cattle were sometimes driven through our ranch on their way to the railroad, from Jal, New Mexico. I would always accompany them through our ranch to make sure none of our cattle were picked up and for the association with the cowboys. There was another small town of Cooper, in New Mexico, named after the Cooper family. George Cooper worked on a ranch adjoining this one and we became good friends. We worked together every opportunity, and would visit when we had time.

When I returned from my Christmas vacation, B. J. told me he had a horse just out of town about two miles that he wanted me to ride back to the ranch. He had bought this horse from a negro "Bronco Buster" who said he was broken to ride. B. H. had bought him several months before and he had not been ridden since. We drove out to get the horse and when I was putting my saddle on him,

I was sure he was going to buck. However, the old pony waited until we were outside before he "broke-in-two." I made what I think was a pretty good ride or I wouldn't be telling it.

He was pretty "salty" and I rode him pretty fast the four miles to the first gate. I had a little trouble getting back on him and was afraid I would have trouble at the other gates and kept "crowding" him faster than I should, and he gave me no more trouble. B. H. told me he would overtake me on the road but I beat him to the ranch by several minutes.

Our nearest neighbor, Mr. Cochran, lived two miles away. He was a fine old gentleman. He had been on a number of cattle drives from Texas to Dodge City and Abilene, Kansas. He had also made the long drive to Montana. I had orders to help him every way I could. It was a pleasure to help him with his windmills or cattle and I was glad of an excuse to be with him.

B. H. sold 300 calves and was to deliver them to Andrews, Texas. Three or four of us drove them to the Clabber Hill ranch and the other men returned home. I spent the night there. Some men from Andrews were to meet me early the next morning. One of the Clabber Hill men helped me start the calves, then left me, expecting the other men would soon be there. They didn't show up and I tried to drive them myself, but 300 big calves looking for their mothers are hard to drive.

The calves would see some cow in the distance and a bunch would start to her. Others would start to a cow in a different direction and so it went with them going off in small bunches. I soon quit trying to drive them and simply tried to hold them together and my horse was almost exhausted when I finally saw a man coming. There should have been two or three but one man is a big help under the circumstances.

We finally got them to the stock pens in Andrews and counted them out; none were missing. I slept there that night, on the ground, on the outskirts of the little town of Andrews. I ate an early campfire breakfast with the cowboys then left for the ranch.

After I had been on the ranch about a year I got to thinking, if I don't get back to Agnes (or rather, Poolville) Ruby may start going steady with some other old boy and I didn't want that to happen. So, I quit my job. My sister, Nola, and Hansford were living on the farm. I bought an

interest and became a pardner with Hansford in some hogs and farming. My main interest, however, was dating Ruby. My parents had moved back from Dallas about this time and we all lived together in the old big house and got along fine.

My Dad told me I "may as well get married, I wasn't going to be any good on the farm until I did." This was one time I was willing to take his advice. We had been going together about two and a half years and I was sure she was the one for me. On October 8, 1916, we were married. I still think this was the best act of my life. After 56 years together we have never threatened separation or divorce. My family have all loved her and shown her great respect.

My brother Ray was away attending medical school. Frank, my oldest brother, had finished medical school and was practicing medicine around Agnes. He first used the horse and buggy but later bought a car. He later moved to Weatherford and threw in with Dr. Leach who was operating a hospital there. At the beginning of World War I, Frank volunteered into the Army and soon left for France. He left his car with Ruby and me. We had never owned one of our own. A year or so later it was apparent he would be gone a long time, so we bought the car.

It was hard to get help on the farm during the war and the women made farm hands of themselves and all worked hard to make a living.

Hansford and Nola bought a garage in Springtown and moved down there. My father died in 1919. This left mother, Ruby and me on the farm. I suppose it was very lonely for mother. A couple of years later she married a nice neighbor, Mr. W. McKinnon.

Ruby and I stuck with the 3,000 acre spread. We had accumulated a small bunch of cattle of our own and were taking care of the family herd and raising a few hogs, wheat and row crops. A few drought years preceding the 1921 business slump was a little too much; we decided to "go west."

I had a cousin, Charlie Moose, in Williams, Arizona, who happened to write me about this time, wanting me to come out and work for him. He had a small "dry farm" and said he would pay me when I worked and would board us and we could stay at his house when we were not working. This was the same proposition my father made him, years ago when he was a young man and came to Texas from North Carolina. I thought this was a pretty good deal

and took him up on it. However, I was determined not to be on the receiving end much of the time, and did not plan to work for him very long if I could find anything else to do.

We traded the little Chevy roadster we had gotten from Frank for a Model T Ford and fixed it up for travel. About the first of May, 1922, we and Ruby's father drove off.

Nota and Hansford moved to the farm and we left everything in their care. We never even sold our cattle or farm machinery. This pulling up stakes and taking off to a strange part of the country, leaving all we had to show for years of hard work, was quite an adventure for us. We didn't want to "burn any bridges" -- we may want to come back. But we were "fed up" with farming in this country and felt we would not be back for a long time.

Touring the country was new in those days. Ruby was sure trousers would be more suitable to wear than skirts. She consulted a lawyer friend about the legality of women wearing men's clothes and he advised her that as long as she did not try to pass herself off as a man, there was no law against it. He also told her he thought it was a sensible garb to wear on such a trip. She bought her first pair of knickers and wore them.

We had been having good rains in the spring of 1922 and the roads were terrible. The only pavement in the country was some brick pavement between Weatherford and Mineral Wells on Highway 180 and some of the same between Weatherford and Fort Worth. They were building the Bankhead Highway from Fort Worth to El Paso. This portion is now generally called Highway 80. Ranger and Eastland were booming oil towns then and the heavy oil field trucks made the roads almost impassable, or as a service station attendant told me, they were "almost impossible."

We decided to go by Mineral Wells, at least we would have a few miles of pavement. When we went through Breckenridge there were three deep ruts right down main street, two for the wheels and one for the differential. When we got beyond the oil fields the roads were not so bad, or that is, the ruts were not so deep. We camped the first night just west of Breckenridge and the second night east of Big Spring. There were no motels those days. However, there were a few "Camp Grounds" in some of the towns, where one could use their fireplaces and tables and they had water on tap. There was a small charge and one was supposed to buy their gasoline and groceries.

After being stuck in the mud a few times and pulled out with teams and towed across a lake behind a wagon, we made it to El Paso in four or five days. We stayed there with Ruby's Uncle, Tim Taylor, a couple of days then started up along the Rio Grande into New Mexico.

If the roads were not too bad, we would get about 30 miles to the gallon of gasoline and about the same in oil with the old Model T Ford. In a small town in New Mexico, we drove up to a service station and I asked the price of gas, the man said it was 50 cents. I measured the amount we had in the tank and we had three gallons. I then asked how far it was to the next station and he said it was 90 miles. I told him I didn't need any. He said, "You'll never make it." I said, "You just watch me." Well we made it and had some gas left, but still had to pay 50 cents per gallon.

In New Mexico, when at least 35 miles from any town, we twisted out a rear hub. It happened that before we left home I gathered up a bunch of wrenches and other tools and spare parts for the car. Among these parts was an extra hub. We went to work beside the road and in an hour or so we had the repair made and were on our way.

At Elephant Butte Dam a caretaker took us through the dam. We had never seen anything like it. At Socorro, New Mexico we left the Rio Grande and headed west. We spent the night at Magdalena at a Camp Ground and had to buy a new tire. A few miles west of there we came to high elevation and our first pine trees and crossed the Continental Divide. About six miles east of Quemado, we pulled off the road to camp and were out about 300 feet in the sage brush when a front wheel fell off.

A man and his wife coming down the road saw what happened and walked out to offer help. I told him I had broken a spindle bolt. He said he did not have an extra, but I could ride into town with them and get one, but he could not bring me back out. I told him I could walk back but that I was afraid all places of business would be closed by the time we got to town. He said, "I know the garage man and he will open up if he has the bolt." I got the spindle bolt and walked back out the six miles. Ruby and her Dad had a fire burning and I could see it long before I got to them. We replaced the new bolt by firelight and by dawn the next morning we were on our way.

Most of the road from Holbrook, Arizona, to Flagstaff we just bounced from one rock to

another. We camped our last night in the cedars east of Flagstaff. Before going to bed, Mr. Taylor, Ruby's father, hung his pocket watch in a tree. The next morning we planned to go by the Ancient Cliff Dwellings, before going into Flagstaff. On account of the rush and excitement, no one thought of the watch until near noon. The road was terrible and we thought the expense of going back may be more than the value of the watch, so we left it.

The Cliff Dwellings had been made into a National Monument and were controlled by the National Park Service and supervised by a nice old Park Ranger. He instructed us how to get down to the Dwellings and cautioned us not to deface anything. The dwellings were under a long shelf of rock and the Ancient Dwellers had walled up the front with stones and partitioned off rooms, making a long apartment which was very solid and substantial. Water must have been carried up from the bottom of the canyon. Mr. Taylor had disappeared and we waited a long time for him to return. When he finally came he said he had been to the bottom. He was like this, he wanted to go to the top of every mountain and the bottom of every canyon we visited.

We drove into Williams early in the afternoon of the 12th day of travel. We were going down a hill overlooking the town when Mr. Taylor said, "You kids have driven 1,200 miles to this place." Evidently he was not favorably impressed with the looks of our future home.

We went immediately to Charlie Moose's residence and he met us with open arms, a big smile and a lot of "hot air." His wife, Alice, seemed glad to have us.

Although Charlie was quite a prevaricator, he was also friendly, kind and generous. He was proud of his State, his town and above all his farm. The farm was 160 acres of land he had "proved up on" as a homestead. The growing season was short and cool. Only crops that were more or less frost proof, such as potatoes, small grain, cabbage and head lettuce could be grown.

Charlie took us all to such places as Grand Canyon and gave us a rundown on the state as a whole. From what he told us and from what I learned from living in the state so long, the state of Arizona is divided into three distinct geographical regions. The plateau region (which is the highest), the mountain and the desert regions. Flagstaff, Williams and Grand Canyon are the main

towns on the Colorado Plateau. Prescott and Payson are in the mountain region and Phoenix and the surrounding areas are in the desert. The plateau is more or less flat and would be fairly level except for the separate hills and peaks. There are no mountain ranges on it and the hills and peaks are separated to where one can drive around between them.

The general area is around 7,000 feet elevation with some of the peaks as high as 12,000 feet, like the San Francisco Peaks. Some of the other high ones are Kendrick, Sitgreaves and Bill Williams, in that order. There are numerous smaller ones and I have been to the top of most of them. They are all old, extinct volcanoes; none have been active for the past 1,000 years. The most recent are north and northeast of Flagstaff. Here are found great lava beds and cinder hills with little or no vegetation on them. These cinders are used to surface the county roads in place of gravel which is very scarce in that section.

Cinders are non-conductors of heat and cold and are used as insulation in walls of icehouses and root cellars. We lived near a hill where many truck loads of cinders had been dug out of the side and used as surfacing on the highway, leaving a deep hole in the hillside. In the winter, snow would blow into this hole and pile up several feet deep. Then, when warm weather came, the walls thawed and the cinders would crumble and roll down and cover the snow a foot or more. The cinders would serve as insulation and the snow would keep far into the summer or until the summer rains melted it. We would rake the cinders off and get the snow and make ice cream during the hot weather.

After staying at Charlie Moose's a few days and running around seeing the sights, I wasn't needed on his farm, so I began looking for a job. The spring cattle roundup was about ready to start and 1 thought I may get on as a cowboy. But I learned most of the ranches in this vicinity were small outfits and all worked together and hired very few extra men. 1 tried to get on at Grand Canyon as a guide but they already had their men for the summer.

I then went to the big sawmill, the Saginaw & Manistee Lumber Company. They took me on. They employed several hundred men, mostly Mexicans. My first job was helping load box cars with lumber. 1 didn't know a thing about handling lumber. 1 could see the Mexicans did it a lot easier and

better than I was doing. One day I was alone loading heavy 2 by 12s. Doing a lot of work but getting very little lumber in the car. The boss came by and stood watching me and I told him, "I can't get it to lay in there like those Mexicans can. How do they do it." He said, "I'll show you", and he did. He had me try it again but 1 made very little improvement. He said, "You are better but let me show you once more." After this try he told me all I needed was practice. I soon got to where, if they needed a car loaded in a hurry, before the train came to take it out, they always put me and a certain tall Spaniard on it. This Spaniard, Henreke Poses, and I remained good friends for years after we both left the mill.

Ruby's father had gotten a job with the County road crew and they camped out of town near their work all summer.

Before we left Texas, Charlie Moose had told me in one of his letters the town of Williams was surrounded by National Forest land. I think this was one inducement in our deciding to go to Arizona. I had read articles about some of the duties of Forest Rangers and secretly hoped that some day, in some way, I could manage to be one. That is another reason I took the job at the sawmill. I was in hopes it would help me learn something about lumber and timber and be a lead to my goal.

Ray was now married to Elsie Shepherd and was practicing medicine in San Bernardino, California. We had been in Williams only a short time when they came over for a short visit. Ray went with me to the mill and I hunted up my boss to ask about getting off for a few days so we could be together. When I introduced Ray to him he offered Ray a job before I could tell him what I wanted.

The next day we all "piled" into the old Ford and drove to Grand Canyon, 70 miles away. The road was muddy and we had to put the mud chains on and plow through the mud several miles. We ran into a dry stretch of road and took the chains off, then we ran into more mud and had to put them back on. We camped out in the brush and made several rim drives and enjoyed the "big ditch." When we were ready to return to Williams we drove to the service station for gasoline, measured the amount in our tank and the man said, "You don't need any gas." That shows the good mileage we got with that old Ford.

After 1 had worked at the mill a couple of weeks,

Charlie and his wife left on a trip to North Carolina and asked us to look after things. We lived in their home and made frequent trips to the farm. I had to lay off from the mill long enough to put up his hay crop.

Ruby had a position running the Williams Public Library. She kept it open three and one half hours in the afternoon and one and one half hours in the evenings. She was not paid in cash, but there were nice living quarters in the back where we stayed, with lights, water and fire wood furnished. We moved in there just before the Mooses returned from their vacation.

It was getting close to Christmas and Ray and Elsie invited us over for the holidays. I had been breaking trail in the deep snow for weeks, going to work before daylight every morning and thought it would be nice to see the California flowers for a change and decided to go. I went to the depot to see about a train ticket and the Agent told me if I would wait until after midnight the holiday rates would be on. We thought saving money that way would be easier than making it "hustling" lumber. The first train after midnight was about 1:30 a.m. Ruby had our little "steamer trunk" packed and at 1:15 a.m., we took a short cut from the Library to the depot. With the trunk on my shoulder, we crossed the tracks, up between some box cars and down across more tracks, through about a foot of fresh snow.

Ray and Elsie were at the station and we enjoyed the palms, green trees and flowers. We had never seen such a pretty sight. I don't remember how long we stayed, too long I suppose. We made a lot of trips through the years and always had a good time. Elsie was always cooking some new dish for us to try, artichokes, anchovies, avocado and many more.

It was a good thing Ruby was earning our rent and utilities because I was making only \$90.00 per month. I was paid by the hour and worked 60 hours a week, ten hours and 20 minutes per day, Monday through Friday. These extra minutes each day were so we could get off two hours early on Saturday.

I had only worked a short time when I was given the "Molding Shed" and retail orders. This shed was a long building with a driveway down the center and doors at each end. In it were kept good grades of siding, ceiling and molding. I was to keep the bins well stocked with these items. When any was needed I would give an order to the planing mill foreman and he would have the plane

run me a supply and I would stack it in the proper place. If someone in town wanted to build a house or something, they could give me a list of the materials and I would go to the lumber piles and get the rough boards and have it made.

l also scaled logs (measured the board feet in them) when they came in on the railroad cars from the woods, before they were dumped into the pond at the sawmill. I thought my scaling must be very inaccurate because they were piled high on the logging cars in a way that it was impossible to get to the ends to measure them and I had to guess at a lot of them.

In a week or so they wanted me to put in my whole time scaling in the mill and told me my scaling had been showing up good. They raised my pay, five cents per hour. I will not go into detail about this job but it was the hardest work I had ever done. Many times they had us come back after supper and work two and a half hours more, making a total of 12 hours and 50 minutes for the day, with the regular hourly rate of pay; no overtime pay.

All this time 1 was studying and planning for the U.S. Civil Service, Forest Ranger examination. Ruby helped me every way she could. The Library was a good quiet place to study. We made friends with as many Forest Service employees as possible and found them all to be very fine folks. 1 read and studied everything these new friends gave me and took a correspondence course in Surveying and Mapping.

If I didn't go to the Forest Headquarters Office every few days, I called them on the telephone. I suppose they got tired of this because they finally told me they would put me on as "Ranger at Large." This meant that I would not be attached to any certain Ranger District but would be shifted around where needed.

Ruby and I were very happy and, to celebrate, we went to a movie that night. I notified the Mill Foreman I would be leaving in a couple of weeks. He offered me a raise if I would stay and said I had a better future with the mill than with the Forest Service. I told him I planned to make this my life work. They sent a man around for me to give a few days training before I left. Some of the Forest Service personnel we first met are still some of our best friends. Tracy and Kitty Rice are at the top of the list. We write them several times each year.

On June 11, 1923, I reported to the Supervisor's Headquarters of the Tusayan National Forest, in Williams, Arizona, for the assignment of my first duty. George Kimball was Forest Supervisor and Mr. Cope was Assistant. Until further notice, I was to work at the Camp Clover Ranger Station (Williams Ranger District) under the supervision of District Ranger Tracy W. Rice. Nothing could have pleased me more. Tracy and I were already good friends. This was only two miles out of Williams and I could still live in the Library and walk out every morning and back at night. As I innocently told another Ranger some time later, that wasn't much of a walk, I only worked eight hours each day and had lots of time.

My first job was helping an engineer survey some land just out of town around the "Three Sisters" Mountains. There was a young man also helping. One day he and I caught a couple of lynx cat kittens and took them home and raised them.

Tracy told me I would have to have a horse, so I borrowed one from Charlie Moose for a while. Tracy wanted to know if I could shoe a horse. I told him I had shod a few. He had me shoe a couple of government horses. The next job was to truck some lumber to the foot of the Bill Williams Mountain trail, then take the horses and pack it up on the mountain and build a lookout tower to replace the old tower (Figure 2).

This mountain was 9,000 feet high and the trail was four miles long. This job took several weeks and I camped there while working but walked down several times. I used the two government horses as pack animals and made two and sometimes three trips per day. The fire lookout man was on duty, living in a cabin on top. Also, a Mr. Reed was camped in a tent. He was blasting deep holes in the rocky ground, into which we were to set the four corners of the new tower. Someone had cut and dragged up four big, long poles for the corners and some smaller ones to be used for braces. The top of the mountain was covered with large boulders and the old lookout shelter, which was about six feet square, was on wooden blocks straddled over the rocks. The new one we were to build, would be of pine lumber, about seven feet square with windows all around, and a hip roof covered with shingles. The little shelter would be 16 feet off the ground, mounted on a pole tower.

When I got the material packed up, I then took my bed and some "chuck." The next trip I walked, planning to stay and help Mr. Reed build the



Figure 2. Bill Williams lookout tower with, in the words of the 1924 caption, a "comfortable observatory." Photo by Roy Headley, July 1924.

tower. When we got the pole frame up and were ready to begin the little house on it, Mr. Reed climbed up. He took one look down the side of the mountain and said, "This is too high for me, I quit." He did quit and I had to do most of the work myself. Tracy would come up to help me when I had to have someone. Mr. Cope came up a few times.

The lookout man was laid off soon after we started the project. I camped in a tent until he left then I moved into the cabin he vacated. Ruby walked up two or three times and helped me with some of the finishing work. I always walked down on Saturday night and back Monday morning. I could walk from the Library in Williams via Camp Clover and the old north trail to the top in two hours. This was six miles and over 2,000 feet climb. I was always up there ready to go to work by 8 o'clock in the morning.

I learned from Tracy and others who wanted to help me, and from books they handed me to read, that

when the western states were first being settled, most of the land was owned by the Pederal Government. (About two thirds of the land in Arizona is still Federally owned). A lot of this land contained valuable stands of timber that were being exploited by individuals or corporations and no one seemed to have interest or authority to stop it, until the President of the United States proclaimed these vast areas to be Forest Reserves. Later, they were called National Forests and put under the Administration of the U. S. Forest Service, Department of Agriculture.

Other areas placed under the control of the Forest Service were watersheds that drain into the big reservoirs. Some of these contained no timber but were covered with brush and grass that had to be maintained by protection from over-grazing and fire to prevent erosion. Some were scenic areas such as the Grand Canyon, which was first administered by the Forest Service and later turned over to the National Park Service, in the Department of the Interior. Other Federally owned lands in the western states are Public Domain, Indian reservations, National Parks and monuments. The Public Domain is mostly open prairie or desert and until rather recently had no supervision and was grazed by anyone who had prior rights. Within the last few years this great domain has been placed under the control of the Bureau of Land Management and is mostly referred to as BLM land.

Some of these Districts that were turned over to the Forest Service were so large that they were divided into several Forests of from one million to two million acres or more. These Districts, later called Regions, are under the direction of a Regional Forester and his staff.

All of the Forests in Arizona and New Mexico are in Region Three, with headquarters in Albuquerque, New Mexico. The Regions are divided into Forests with a Forest Supervisor in charge. The Forests are divided into Ranger Districts and the man responsible for them is called a District Ranger. Each Forest may have from two ranger districts to as many as seven or eight. A ranger district may have from 200,000 acres to 600,000 or 700,000 acres in it, depending on the type of country and the amount of work.

All resources on a National Forest are used to the best advantage as long as no harm is done. Timber is cut, but never faster than young trees are grown to replace those cut. In Region Three, timber will reseed if given a chance; planting is

unnecessary. Grass is pastured as long as it is not overgrazed. Minerals are mined, roads and highways are built when needed. The Forest Service never leases its land for any purpose. All operations are carried out under permit for a specific purpose. Timber is cut under permit and paid for by the board foot. Livestock are grazed under permit only and a definite number are permitted to graze on a certain area. Land can be fenced for a pasture with a pasture permit, if part of the area is wanted for cultivation, it must be under a cultivation permit, etc.

A District Ranger handles a district just like he would if he owned the land himself, as long as established rules, regulations and policies are carried out.

When selling timber, each tree to be cut is marked (designated) and measured to determine the board feet in it. Only trees that are mature or defective are marked. Only livestock suitable for certain areas are permitted. Numbers on the range are determined by counting and should be checked frequently to see that no excess is on the range. This was easy in high country where the stock were taken to a lower altitude in the fall to get them out of the snow. They could be counted when they were driven back in the spring. When they were left on the range year-round it was necessary for the ranger to ride with the owners during roundup to get a count on the numbers.

Later, the Forest boundaries were fenced; then still later, the forests were cross fenced into grazing allotments, units or pastures. Some were individual allotments and some were community allotments. It was not necessary to fence between the different sheep allotments. These dividing lines could be shown by markers or posters of cloth, tin or cardboard, tacked on trees or posts every few hundred feet, or close enough together so they could be seen when approaching the line. The herder could see these and know that is as far as he should allow his sheep to graze.

There were sheep trails and driveways running from the high summer range, one or two hundred miles down to the desert country where the sheep were wintered. There were several thousand driven down over these driveways each fall from the Flagstaff-Williams area, and back in the spring. These driveways were from one half mile to two miles wide and were indicated with markers along their boundaries, as were the allotments.

After working with Tracy until past mid-summer, I

was detailed for a week or more to the Anita-Moqui District near Grand Canyon to assist Ranger Arthur Gibson with blazing a route for about 20 miles of fence. This fence was to run from the Grand Canyon rim at Lipan Point, south to the Herb Babbitt place. It was to separate the Buglen and Babbit cattle. I would need a horse after I got up there so the only thing to do was to pack my bed on a horse and ride another 80 miles to Hull Tank Ranger Station where "Gib" was living.

The first night out of Williams I stayed at a sheep ranch headquarters at Valle. The next night I made it to Hull Tank. The next day Gib and I packed up and rode to the Babbitt ranch to start blazing the fence route. We took our beds and enough chuck to last a couple of days. After we had finished this job and worked some telephone line, I returned to Williams. I spent one night at the Anita Ranger Station then did the 45 miles to Williams the next day.

I took the Forest Ranger Examination in October. I suppose Supervisor Kimball and some of his staff must have felt pretty sure I passed or would pass because, about this time, Ranger Bascom (who was on the Chalender District) resigned and they sent me out there to take his place. It wasn't until the following March that I heard from the examination and learned I had passed. I immediately called Mr. Kimball from the Post Office. He seemed pleased and told me I could take a new lease on life because they were going to leave me there.

I wrote home for my folks to sell my little bunch of cattle and all farm equipment as I expected to be in Arizona a long time. They held an auction and not only sold my things but everything on the home place. They then leased the land and Hansford and Nola moved to Houston, Texas.

When I was instructed to take over the Chalender District, ten miles east of Williams, Tracy gave me one of his horses. The horse was pretty old, but still plenty good to pack and do some riding. I packed my bed, some work clothes and rode out to stay with the Bascoms until they left for California. A few days later I took them to the train in a buckboard (light spring wagon) and brought Ruby and what little we had in the Library back with me. About all we had to bring, was a folding bed and bedding, trunk full of clothes, a box of genuine Blue Willow wear dishes, one Navajo rug and a sewing machine.

We had sold our old Ford, so we immediately began

saving pay checks to buy another. I remember Mr. Kimball was out on office inspection and pulled a desk drawer open and several of these checks fell to the floor and he nearly had a fit. He just couldn't imagine a ranger saving that many checks at one time. In a few months we had enough to get an enclosed Model T Ford sedan.

There were very few enclosed cars up to that time. Until we bought the car, our only mode of transportation was horseback. Parks, six miles to the east, was our Post Office and a little store where we could pick up a few groceries, but Williams was still our shopping center. We would ride in there and lead a pack horse to get our supplies.

The Chalender Ranger Station dwelling was a nice little frame house with two bedrooms, a living room, office room and kitchen (Figure 3). It had a wood burning cook stove and a wood burning heater, no cooling was necessary. There was a small barn with two stalls for horses, a combination woodshed and a tool house and an outdoor "John."



Figure 3. Chalender Ranger Station, photographed in September 1930 by S. F. Wilson.

The Chalender Administrative Site contained 120 acres in what is called Pittman Valley. It is an open area, not a tree on the site. It was located here on account of the water. It is one of the few places in that region where water is plentiful and shallow. Water stood near the barn in a nice pool with gravel bottom, never more than one and a quarter feet deep but never dry. The well was only about six feet deep but afforded plenty of water for house use. It was a cold, windy place; and when there was no wind the cold settled in the valley and 20 degrees below zero was not uncommon in the winter. I have seen it 30 below several times and 37 below once during the 14 years we

lived at this place.

The Chalender District, at that time, contained about 250,000 acres, which is small compared with some others, but I soon learned it had a tremendous amount of work. There were four populated areas on the district: Red Lake, Pittman Valley, Parks and Garland Prairie. Each of these had a school which operated only during the summer months, on account of the severe winters. These people had "taken up land" as homesteads. They could file on 160 acres. They could only homestead land that had no timber on it. Garland Prairie (Figure 4) was the largest open area, about six miles across and more or less round in shape. Some of it was too rocky to cultivate and was never listed for homesteading, so it remained as National Forest Land.

I didn't get very many instructions from the Supervisor's Office and, being new on the job, I didn't know just how to take hold, so I began improving our living conditions. There was cold water piped to the house from a tin tank on a platform, but it had no protection from the cold and had to be drained before cold weather. I boxed this up with a double wall building and filled the walls with sawdust from a nearby sawmill. I put water pipe coils in the fire box of the wood burning cook stove and installed a reservoir so we had hot water. All pipes were

protected so they did not have to be drained during the sub-zero weather. I built a cupboard on the back porch and Ruby used this as a refrigerator, summer and winter.

The district had one fire lookout station on it, Volunteer Mountain. We had been at Chalender only a short time when I thought I had better go to the lookout station and put things in shape for winter, drain the water, if any, and disconnect the telephone. Ruby thought it would be nice to go along for the horseback ride. I had never been there and didn't consider how far it was. We left home early, made a big circle over Garland Prairie and came back over Volunteer and returned by Parks to get our mail. We arrived home after darkness, Ruby was tired, stiff and half frozen. We had ridden about 30 miles. After that when I wanted her to go along I had to promise to make the circle short.

When I was on the Williams District with Tracy Rice he kept telling me things he thought would be helpful to me when I got a district of my own. He took me into his office and explained the filing system and the Forest Service way of writing memorandums, et cetera; but, to me, it was just like a blind man trying to see in a fog. When I left there he told me he would continue to help me every way he could and if I had rather call him than the Office, about things, to do so.



Figure 4. Garland Prairie, photographed by Charles Cunningham, September, 1937.

After I had been at Chalender a couple of weeks I had accumulated a lot of mail I did not know what to do with. I called Tracy one Sunday and he came out and helped me file a lot of papers. Then I showed him a couple of letters and asked him what they were. He said, "This is a couple of guys wanting to prove up on their homesteads. You have to go see them and get the dope and write them up." He showed me how to look in the files and find past reports, not only of homesteads but of other things as well. The following morning I rode about 15 miles to the Red Lake community and asked the man how many acres he had cultivated the past years, how much crop he made and looked over his dwelling, et cetera. The next day I rode the opposite direction and interviewed the other man. When I returned I wrote them up, and they got the Patent to their claim.

Next, I had to make annual reports on the different "Special Uses" over the District. What we called Special Uses were merely permits to use Forest Land for special things like pastures, cultivation, stock tanks, corrals, drift fences, spring developments, cabins, barns, dwellings, etc. On account of this being a heavily populated district, there were a lot of these Uses. We were to report these in duplicate, showing if they were uses and the condition of maintenance, on form number 399, which fit into a pocket sized, loose-leaf notebook. We were supposed to carry these, along with a lot of other forms and maps, in our saddle pockets and fill them out on the ground when we happened by the permitted Use. These reports were due when I moved on the district. I didn't know where these uses were located and had to do a lot of riding to find some of them, like stock tanks that were hidden in canyons and draws. I finally got them all checked and mailed in.

A few days later I was in the Supervisor's office and asked Mr. Kimball, "How were those reports I sent in." Meaning mostly the homestead reports. He asked, "What reports?" I wanted to make it sound good so I said, "I sent in about 300 reports, mostly forms 399." He said, "Oh, they were all right." That was about all anyone could get out of him; he was not much of an instructor. I liked to work for him, however, and he proved to me several times that he would stay with you if he thought you were in the right.

That winter was spent like most of the following winters, shoveling snow and working in the office. We had written plans for most all branches of work. There were range management

plans, timber management plans, fire plans, sign plans, game management plans, work plans, etc. There were base maps, fire maps, water and fence maps to correct, revise and bring up to date.

In this country we did not have spring as it is generally known, winter just faded into summer. The spring months were cold and windy with snow flurries likely into June. I remember one time an old man said to me, "I have never seen the wind blow like it has this spring." I told him, "I haven't either, since last spring." One of the local cattlemen had a sign on his car which read, "Four Bar Y Ranch, Flagstaff, Arizona where winter plays hell with summer."

Some of the farmers would move to town for the winter, but most of them stayed on the farm to care for their livestock. They would lay in a supply of groceries and other necessities to last for months. During the severe winters and deep snows they simply stayed at home until the snow melted in the spring. Ruby and I always kept a large supply of everything on hand but we lived close to the highway which was most always kept open, and we kept a snow plow so we could get to the highway. One spring I met one of these farmers at the Post Office at Parks. He had several months of growth of hair and I asked him when he got out. He said, "I got out today but my neighbor will not be able to get out for two or three weeks more."

These rural people kept pretty close touch with one another. There were few telephones but they commuted by means of snowshoes, skis or horseback. In case of an emergency a County crawler type tractor or Army "Weasel" was called into use. Sometimes a sick or injured person could be transported by team and sled.

The snow, regardless of the depth through the winter, was usually gone by the end of April. The precipitation through May and June was very little and consisted of light rain or snow flurries. This dry period through May and June was designated by the Forest Service as "Fire Season" and was more definite and distinct than our "Spring" during the spring months. However, the weather here was like it is everywhere, it does not follow a regular pattern. Some winters got very little snow, and I have seen it rain in June, but this is the extreme The summer rains most always start the first part of July and continue through September. I think August and October are the two prettiest months. In August everything is wet and green and October, with its clear, warm days and frosty nights and autumn colors, can't be beat.

When the road, woods and range lands dried out so one could ride, the rangers were a busy bunch of men. This being housed up all winter is not for the outdoor type. One of the local men in Williams once said, "It is a sure sign of spring when you see the rangers taking supplies out of the store house." There were telephone lines to maintain, allotment and driveway boundaries to post, cattle and sheep to count onto the forest. There were lookout men to install and train on the job, and a thousand other jobs waiting to be done. Later in my career, this kind of work was done by temporary employees -- leaving more time for the ranger to do the technical work and supervision.

Getting the right person to man a lookout station was very difficult because it was very lonesome and confining and a man had to be of a certain temperament before he could adjust to this kind of life. He may go for days without seeing anyone except the ranger who may come up every week or so to give him instructions or to bring him mail and supplies. He was required to be within hearing distance of the telephone during all daylight hours and sometimes at night. A good lookout will see a smoke the minute a fire starts, will report it to the ranger or dispatcher, give the azimuth reading, the location, the size of the fire and the rate of spread. It is also a great help if he is familiar with the country so he can tell the "Smoke Chaser" the best route of travel to get to the fire. Some of the best can even tell the dispatcher how many men it will require to handle the fire. An older man generally makes the best lookout, he will be willing and contented to sit there day after day.

A young man can think of a thousand places he would like to go and the good wages he could be drawing elsewhere and some little gal he would like to be with and gets restless with the monotony and wants off too often. If the Lookouts get a few fires to report, like after a lightening storm, it is not so bad, but most of the time they just sit there day after day with nothing to look at but the scenery and it is very tiresome.

I have had some of the best and some of the most incompetent lookouts. One of the poor ones was a young fellow we had cooking on a horse roundup. He was prompt with his meals, good natured and a good cook. I thought he would make a good lookout and put him on Volunteer Mountain. This guy was

on duty all the time and saw every smoke in the country but he simply would not report them. One day I received a report of a fire from another lookout. It was right down at the foot of this man's mountain. I called him and asked if he could see it, he said, "Yes I see it." I inquired, "What is it doing?" He said, "It is running along the ground in some grass and pine needles." I asked why he had not reported it and he said, "I just supposed someone had already done so." I went over to talk to him and told him the importance of reporting any fires he sighted and also told him that was what we hired him for. He never improved and I had to let him go.

I had an old man who would call and report a fire and give the reading on it then immediately hang up the telephone receiver. He didn't wait to learn if we got the message or wanted to ask any questions about the fire. We always had to call him back for some reason. Among the best I ever had was a Mr. Perry. He had worked cattle and ran wild horses and trapped all over the country and knew every trail, rock crevice and coyote den for 50 miles around and could always tell exactly where a sighted fire was.

I had a young smoke chaser who had occasion to listen in on a telephone conversation of Mr. Perry and myself. He said it went something like this when Mr. Perry was reporting a fire. "Clyde, there is a small fire about 25 miles from here in the Round Mountain country. You know where that oak tree is with a big knot hole in it about four feet from the ground." I would say "yes" and he would say, "Well, it is right in that knot hole."

Well, he was hardly that good and I didn't know the location of every tree with holes in them. But here is one that actually happened. He reported a fire about 15 miles away and told me there was a fire down by Owl tank. He said, "You know that trail that comes in to the tank over Johnson Ridge from the east?" I assured him I did and he said, "Take that trail about three quarters mile and the fire is in the next draw about 100 yards north of the trail." He also said, "There was a little thunder shower in there and the fire will not be hard to handle." I found him right in every detail.

I had another Lookout, Oscar Ryberg, a Swede, who was one of the best. He owned a farm at the foot of the mountain. He had a large family of 12 children, all nice kids. He was a cook by trade and for years cooked in a logging camp. That is, he boarded the loggers and ran the commissary in

the woods camp. After his first son, Henry, became old enough to take over, he moved to this farm. At first he didn't know the country as well as Mr. Perry but he learned it from the top of the mountain. After each fire he asked questions as to where it was in relation to the surrounding country, then made a note of it on his map. He was exceptionally good at giving the behavior of a fire, he could tell the dispatcher if the fire was spreading rapidly or slowly, if it was spotting ahead of the main fire or was under control and the approximate size.

It was also a problem to get a good "Smoke Chaser", or Fireman as they were officially called. We had a cabin about 20 miles away where a Fireman was stationed during the fire season. One summer I hired a newly married man to stay there. When he would get a fire call he, or they, would jump in their old car and take off, most often in the wrong direction. It took a lot of training and threatening to get him to keep calm, get the location of the fire and the direction to get to it. Time the season was about over, he was pretty good. I preferred the native cow-puncher type that knew the country, was accustomed to manual labor, and knew how to take care of himself in the woods. Bert Smith, Floyd Barker and Les Cravey were that kind. Just tell them which fire you wanted them to go to and they would take care of it.

In those days a very small percent of a ranger's time was spent on fires. I would say about two percent, and most of this was on small fires. I believe the largest fire I ever had on my district was a little less than 300 acres. However, I was detailed to other districts and other states to some pretty big ones. In 1929 a bunch of us were flown from Flagstaff to Kalispell, Montana to the "Half Moon" fire, which is still talked about. This fire started at the little town of Half Moon and burned into and across the Blackfoot Forest, across Glacier National Park and into Canada. I do not know how far. Only snow and rain stopped it. It must have been thousands of acres in size.

Another time some of us were flown from Phoenix to Los Angeles, then to San Francisco. From there we were taken away up north by Army car. I don't remember the name of this fire but it was a big one that also burned many thousands of acres. We went several days and nights without sleep, worked hard, but had a lot of fun anyway. We were detailed to these project fires as trained, experienced men who were supposed to be able to take over and relieve the local men who were worn

out and exhausted from previous fires. Our being in strange surroundings and unfamiliar with fire behavior in country so different from our Southwestern Region -- I am not sure we made a good impression, but I heard no serious complaint.

On this California fire we had our base camp in a small clearing of about three or four acres. They had a big, fat, ill-tempered cook that took his seat where he could overlook the entire "kitchen." He never turned his hand, but gave strict, demanding orders, right to the point and all the help jumped when he said to. He had the best of everything ready at all times, for any number of men that came in from the fire lines, and there were about 3,000 to be fed. They were constantly coming in large bunches throughout the day and most of the night.

Most of us Arizona men were put on night shift. One afternoon after we had slept a little and had eaten, and were getting ready to go out again, word came that the fire had gotten away from the day crew and was headed direct for our camp. The fire boss immediately set fire to all of one side of our little park and let it burn out that side. Then, about 45 minutes later, when the main fire came, it could only burn the other side. We got a lot of smoke and considerable heat but suffered no bad effects.

After the fire was over some of us from Arizona, Colorado and Idaho, chartered a bus and made a trip to northern California, visited some of the State Parks to see the "Big Trees" and returned to San Francisco for the night. We were quartered in a kind of "flop house." A large basement of a hotel which had cots and beds of all kinds which were occupied by soldiers, sailors and drifters of all kinds. It was interesting and we got by very nicely. The next day we boarded a train for Phoenix.

After we had been at Chalender for a few years, there was a young man, whom I shall call Jack, who had been on "timber sale work" several years and wanted to change to Administrative work, so they sent him to work with me until they found a place for him. He was from the east but liked western ways and was becoming western in a hurry.

One morning Jack answered the telephone and came away saying, "Buckle on your gat man, buckle on your gat." I asked, "What is the trouble?" "The Bank in Williams has been robbed and they want us to be on the watch for them," he replied. We had planned to ride over around Volunteer Mountain, as

I suspected some trespass horses were running in that locality. Jack put on his "chaps" and big "six shooter" and 1 stuck a .25 caliber automatic in my watch pocket and we rode up the highway as far as Parks.

when we arrived at Parks a nice looking little tourist lady showed up from some place. We were the first men she had seen on horses, so she wanted to take our pictures. Jack being dressed in all the western garb got the most attention. Finally she looked me over and asked, "What are you doing with the little automatic in your pocket?" I told her, "I am going to shoot some fellows." She soon ran out of film and immediately lost all interest in us, so we rode on.

We had ridden a couple of miles, and 1 guess we both were thinking of her, or something else, because we had forgotten about the bank robbers, but suddenly we both stopped our horses and sat looking down at some automobile tracks where none should have been. These tracks were on an old abandoned road that had not been used for years. The tracks indicated the car was going from east to west. I told Jack, "There is an old pasture fence across this road, that runs from the railroad right-of-way fence, to that hill over there and unless someone has torn it down, the car that made these tracks is just a little way from here." I also mentioned the fact that it would be only a short walk up to the little flagging station of Maine, where one could flag a train and go some place in a hurry. We looked at one another a few seconds then decided we would ride down to the fence and see if there was a car there with strangers in it.

We rode in silence for a distance, then Jack said, "1 wish 1 had my 30-30." 1 asked, "What do you want with it?" He said, "1 would get up on the side of that hill and you could go down and talk to them and if they started anything 1 would open up on them." 1 told him, "No, they may not be as nice to talk to as the little tourist gal, and you are a better talker than 1 am. I would take the 30-30 and let you go talk to them." He came back at me with, "But you are the one that is going to shoot some fellows, remember." I admitted weakly, "Yeh, 1 did say that, but just what did that deputy say he wanted us to do anyway?" Jack was not so eager by this time and admitted, "He just wanted us to be on the lookout for strange cars or people and let them know if we saw anything suspicious. I told him, "That is more like it and that is just what we will do." When we arrived at the fence the car had passed over it and on down to the County road a short distance beyond.

We went our way, happy to be attending to our own business. I learned later that the car tracks we got so excited about were made by a local sheep man who had passed that way looking for his sheep.

One winter, about the first of January, we were returning from a Texas vacation by way of Phoenix. The nearer we got to Williams and the higher elevation, the more snow we ran into. In Williams we stopped by the Supervisor's Office and Tracy Rice was there. I asked him if the road to Chalender had been opened and he said, "No, you folks can't get home this evening, you may as well spend the night at our house. Tell Ruby to go on up there and 1'll call Kitty she is on the way." I told him, "We have been gone three weeks and want to get home. Give me a couple pairs of snowshoes and we will leave our car at our nearest neighbor's house and snowshoe on home."

We got the snowshoes and left town as soon as possible, we knew it would be dark and cold before we could get home and settled for the night. When we reached Pittman Valley the snow plows had piled the snow several feet high on either side of the highway, leaving barely enough room for two cars to pass. When we got to the neighbors we could see where he had pulled his car out and back with his team, leaving a gap in the ridge of snow, but still axle deep. I gunned the car and hit the gap as hard as I could and just made it to where the back bumper would clear the highway traffic.

We snowshoed the half mile across the open fields to the Ranger Station. We went right over the yard fence and down onto the front porch. I had a little light, flat bottom sled I had made for just such occasions. 1 got it and went back for the rest of our luggage and groceries. It was dark before 1 got back and 1 walked off the bridge, which was across the creek a short distance from the house, the sled and contents piled on top of me. The snowshoes were tangled under me in such a way it took me about 30 minutes to get up and get the load re-arranged. When I finally got in, Ruby had a hot fire going in the wood stove and we were happy to be back. It was about 20 degrees below zero in our bedroom that night, but that was nothing unusual, it was that cold lots of times.

I could not leave the car on the highway for long, so the next day I drove it to Williams, planning to store it in a public garage until our road was opened and 1 could get it home. After I got into

Williams the highway became blocked and 1 had to spend the night. Of course I stayed with Tracy Rice. I called Ruby to get the horses in their stalls and close the doors so it would not be so cold on them. The doors had been open all the time we were gone and she had to get a pick and dig about a foot of frozen snow and ice away before she could close the doors.

The town of Williams was filled and running over with tourists. There were not enough sleeping quarters available and the picture show house was kept open all night, so people could sit in there and sleep if possible; at least they would be warm. The streets were parked full of cars. The bulldozers used in clearing the snow, had to pass on the sidewalks. Finally, everything was cleared and the traffic started moving as normal. I got someone to take me home the afternoon of the second day.

In the early 1920s, when I first went to Chalender, the Santa Fe Railroad right-of-way through the Flagstaff-Williams country had been fenced for years. This was about the only fence of any consequence in the entire country and served as a division of the range. People living south of the railroad grazed their livestock on that side and those living on the north side were permitted to graze only north of the track. There was a drift fence running from Willow Canyon, by JD Ranch and on down along MC Canyon to the rim. Cattle on both sides of this fence were owned by the Johnson Cattle Company. In fact, they had most all the range from the railroad to the Verde River, which includes thousands of acres. There were a few small outfits permitted in the area, but most of it was the big company.

North of the tracks it was mostly Babbitt and Buglen, with a few small owners. These two big outfits didn't get along as well as they should and, as a result, both worked the same country separately. One wagon would come along and brand their calves and hold what they intended to ship. then in a few weeks the other would do the same thing. They could have cooperated and saved a lot of time but there was too much jealousy between them. The small owners had to work with both to be sure all their calves were branded and the animals to be sold were gathered. The small owners were paid no wages but were allowed to eat at the wagon free and, in some cases, they were furnished a horse or two to ride. This was not a plot to get a lot of free work from the small owners or for the small men to get free meals while working their own cattle; it worked well for both. The area covered ran from the railroad to the Grand Canyon and it took two months or more to work it all.

In later years this big country was cross fenced into smaller grazing units. Some of the permittees didn't like the idea of "Fencing up the Range" and fought the Forest Service on the plan. After it had been fenced a few years, they agreed it was best for all concerned.

Where cattle were permitted year-long on the Forest, this fencing into individual allotments made it simple for the ranger to keep track of the numbers grazed by the small owners. But with the larger outfits, it was still necessary to ride with their roundups to make the counts. Some of the cattlemen were opposed to having their cattle counted and were disagreeable in every way they could think of. They would try to get the ranger lost if they thought he was in unfamiliar country, "stake" him to a mean horse in hopes he would get bucked off and hurt, or drop cattle out of the roundup and not bring them in to be counted.

A ranger had to be on guard at all times for any tricks. I remember one time we had thrown a good sized herd together and the foreman started cutting the strays out on first one side then the other and letting them go. I yelled at him, "Hey, I want to get a tally on these cattle before you turn them loose." He called out to one of the cowboys, "Help the ranger get a count on all the strays," and kept cutting them on all sides as fast as he could. Well, with the cowboy's help, I got a tally on the different brands but had to do it in a high lope. We later counted this man's cattle with a little more peaceful procedure.

While counting another outfit, we worked quietly around the herd, cut out the strays and held them until we had finished, then the foreman said, "Ranger, if you will get right over there I'll call off the brands for you." I sat on my horse and he quietly called the brands while I marked them down. This just shows the difference in men.

During my career I worked with a lot of the outfits between Grand Canyon and Phoenix, mostly along the Verde River. As a result, I was associated with a lot of cowmen and cowboys, which pleased me very much. Cowboys have a personality all their own, separate and apart from all others. They are a reckless, restless type; they make good friends and bad enemies. They follow their trade because they like it, their wages are low and they work long, hard hours. Once a

cowboy, always a cowboy - at heart at least. They live dangerously and are in the habit of taking care of themselves through all emergencies. Most of them are more or less timid and self-conscious when out of their environment and have little to say. They will size a stranger up for sometime before deciding whether or not to warm up to him.

They hate bullies and braggarts. I was at a ranch once when the men were shoeing a big bunch of saddle horses getting ready for roundup. I noticed one of the new men assisting by holding the bridle reins of the horses the foreman was shoeing. He was bragging about the bad horses he had ridden. I thought, boy you better keep your mouth shut. Sure enough, the next morning when they were saddling up the foreman roped and led out a big sorrel to this man. All hands were watching out of the corners of their eyes when the bragging cowboy mounted. The old sorrel threw him straight up and he came straight down on his head. I suppose his head was pretty hard because he was able to get up. The foreman caught the horse and got on him and kicked him around and handed the reins to the humiliated "bronc rider" but never said a word. The first opportunity, he sent the man to town.

When the boss gets mad at a ranch hand and wants to get rid of him he could simply say, "You are fired," but they seem to want to extend the man's mental suffering and make it as long as possible. They nearly always say, "You can go to camp and roll your bed and tie it. I'll be in pretty soon and take you to town."

A "night horse" is used to stand guard or for other night work because he can get around good at night. A "day horse" has a lot of stamina and can be ridden all day, if necessary, without food or drink. A "winter horse" is kept up in winter, fed well and ridden most every day. A "rock horse" is one with extra hard feet and can get around well in rocky ground. A "valley horse" was raised in soft ground. If he should happen to lose a shoe away from home he would go lame and his hoofs would crack and break and he would become lame before you got him home to shoe him. A "locoed horse" is one that has been eating loco weeds and has gone crazy. A "heavey horse" is one with heaves, a respiratory trouble, something like asthma in human beings. Horses have many kinds of diseases, even heart attacks.

A horse is old at 12 to 15 years but may live to be 30 years old. Most horses are kind and obedient and when one is alone with no one except

his horse, they make pretty good companions. What a cowboy calls a "good horse" is one that is fast, sure footed, easy riding, quiet nature, easy kept, has a lot of "cow sense" and is well trained.

In the spring of 1926 there were a lot of "wild horses" running on the range between Williams and Ashfork and northeast of Williams towards Parks. The stockmen, as well as the Forest Service, wanted to get rid of them and save the grass for more profitable animals. Some of them were branded but most of them were not. Anyway, the stockmen signed releases on any they may have on the range, thereby giving the Forest Service authority to dispose of them as they saw fit. We got a roundup crew together, consisting of several rangers and two or three cowboys with a lot of experience at running wild horses. One of these was to be foreman and boss.

We first camped below the Rim, towards Ashfork where the foreman lived. He had a small cabin where two or three of the men slept but most of us bunked in the barn, on the ground covered with straw. There were several small pigs and some hound pups that liked to sleep during the day and play on our beds at night. It was a very wet spring and all through the night one could hear the rain that came through the roof dripping on our "tarps." All our beds were clammy wet and we never got a chance to dry them out for weeks.

We got a little bunch of 20 to 30 horses together and used them as a "catch herd" or decoy. Some of the men would ride the high points looking for horses, while the others would bring along the catch herd. When any were sighted (a mile or so away) the catch herd was stopped in an appropriate place, usually in scattered trees where the riders could keep out of sight and where the horses would likely pass when pursued. Other riders would sneak around the horses and start them towards the decoy. Still other riders would be stationed along to "point" them, and all would take them as fast as a horse could run into the catch herd. killed the colts and shipped the grown animals to California to be made into soap. We shipped about 300 head and were paid \$3.50 each. We worked about 40 days or until fire season demanded our attention.

In 1924, about a year after I started to work, the Regional Office officials in Albuquerque established a "Rangers' Training Camp" at the Forest Experimental Station at Fort Valley, near Flagstaff and 1 was one of about 40 who were detailed to attend. It was to last four weeks.

They gave us instructions in all lines of work:
Range Management, Timber Management, Fire Control,
Surveying, etc. We learned a lot and had a lot of

These training courses were held every year with a different bunch of men attending. I was at another in 1929 until they broke camp and sent a number of us to Montana to fight fire.

For recreation they got some baseball equipment and insisted we all play, for exercise, if for no other reason. One old Ranger said, "I roll my own cigarettes and that is all the exercise I need."

Every year our own Forest would hold a Rangers' meeting for a week sometime during the winter. These were very informative and we always had a good time. Usually some of the rangers and their wives, who lived quite a distance away, would stay at our house. In the evenings we all would go to a movie, sit around and visit or the men would have a poker game.

Not all the range on the Chalender District was permitted to cattle. About half was permitted to sheepmen, some of which were Pouquette, Bly, Bankhead Burton and the Howard Sheep Company. All were pretty big outfits. They used Mexican and Basque men for herders. One thinks of a cowboy as a rugged individual who spends his life out in the open. They are rugged and they spend a lot of time outdoors, but in comparison to sheep herders they are as hot house plants compared to wild flowers.

A herder seldom sees the inside of a house or cabin. He lives in a 9 by 9 tepee tent the year-round and cooks outside on an open fire. For a cook stove, they use a "Dutch oven" and a frying pan over the coals. Their beds consist of quilts or blankets rolled in a "tarp" (tarpaulin). For a mattress they use cedar or pine boughs or sheep skins or both.

Each owner may have his sheep divided into several bunches called a "Band." With each band there are two men; one herds the sheep, the other cooks and moves camp. The cook is called a "camp tender" or "campero." The herder goes with the sheep and herds them within a mile or so of camp and brings them back to bed them down nearby at night. After grazing a certain small area for two or three days, the herder tells the campero where to move the camp.

The campero packs everything on six or eight

burros (they pronounce it with two syllables, boo-rows) and goes to where he was directed. In these packs are the men's clothes, food, water, beds, salt for the sheep, shovel, axe, guns, tent, sometimes a litter of shepherd pups and sometimes a large tin tub to use for bathing. Most of these men are surprisingly clean with their cooking and I have seen them use a white enamel coffee pot over the camp fire for months and it would be as clean as when it came from the store. If they don't have a tub to bathe in, I have known them to dig a round hole in the ground and line it with a heavy canvas, fill it with warm water and bathe in it. They can bake anything in a dutch oven that can be baked in an electric or gas oven and just as well.

In parts of the nation, I understand, sheep herders use covered wagons for camps in place of the burrows. This would be impossible where I was on account of the terrain being so rough.

Herders are loyal to their employer and honest with their fellow man, even the Forest Ranger. I could ask them how many sheep they had in their band and they would give me an answer and I never caught one in a lie. They are dedicated to their job, their main object is to get their lambs to grow and the older ones to stay fat.

They drove them up from the desert or alfalfa fields around Phoenix arriving on the summer range in the Williams/Flagstaff area, about 200 miles away, about the first of June. They would sell their lambs sometime in September and start back to the lower country about the first of October. They all followed the regular, designated driveways. They would ordinarily graze them along, making about four miles each day. The campero would unpack at noon and make coffee and warm up their dinner, then pack up and go ahead and make camp for the night. The herder would follow the sheep and, with the help of his dogs, keep them pointed in the right direction.

When they were on my district, and I was riding their range, it was a habit of mine to ride by their camp about noon. They always seemed glad to have me eat with them and would start getting out their tin plates as soon as I rode up. I remember once I stopped at a camp and the camp tender said in broken English, "You want to eat now or wait until my pardner he come?" Not wanting to cause any extra trouble I told him I would wait.

Their usual menu was biscuits or a kind of sweet loaf, roast mutton or goat, red beans (hot with pepper), dried fruit of some kind, usually cooked with rice, and always strong coffee. Sometimes they would have beans or stew so hot with chili (pepper pods) it would give me the hiccups and I would have to take a sip of coffee with each bite. The Mexicans would have a good laugh about my not being able to take it. If they had known I was going to be there for dinner they would not have made it so hot. I tried to help them every way I could. Sometimes I would take them fresh eggs or vegetables.

Even the best of herders sometimes had a "Cut" (a few sheep would get separated and lost from the main band). When I ran on to a Cut, regardless of the size, I would ride miles out of my way to tell them about it then they could get them back with the others. I would mail letters or telephone messages for them. For this reason I never had much trouble with the herders letting their sheep get where they did not belong. They often gave me a leg of lamb to take home.

Camping all the time like these fellows had to do, it was sometimes almost impossible to keep their fire from getting out of control and starting a forest fire. One day while driving down the highway in my pickup truck, I sighted a smoke about a half mile off the road, but where I could drive to it. When I got there the Assistant Supervisor and a smoke chaser were there and had the fire stopped but it was still smoking.

When I drove up the campero shouted "Hello amigo." He was afraid he would be placed in jail or fined and was really glad to see a friend, or at least someone he knew. It was not a bad fire, just burned the pine needles under some trees; really did more good than harm. I told him I would have to take him to see the J.P. (Justice of the Peace). He said, "Sure, me go." I could see he was worried about leaving his camp, so I told him I would bring him back shortly. The J.P. fined him \$10.00 and, at my suggestion, suspended the fine. I took him back the 20 miles to his camp.

The Chalendar District most always had a small sawmill on it and a timber sale going. I had to mark the trees to be cut. This marking was done with a light axe or hatchet with the letters "US" on the back. Just chip a smooth place near the ground on the tree and stamp US on it and the same about four feet up from the ground. This US stamp near the ground would show on the stump after the tree was hauled away and I could be sure that tree was legally taken. This helped prevent the

cutters from taking trees that were not marked. Only over-mature, crooked, forked, leaning, lightning struck trees or trees damaged other ways were marked for cutting.

It was a pleasure to look over the area after logging was completed and see only thrifty, young, well-shaped trees. The brush, limbs, etc. (also called "slash") was piled in neat, compact piles and burned in winter, when snow was on the ground and there was no danger of fire spreading. Cull logs, tree tops and large limbs were left on the ground to rot and enrich the soil. A few large healthy trees were left as seed trees. It was not necessary to plant seedlings to replenish the young growth. They would reproduce from seed. All snags (dead trees) were cut and left where they fell. Sometimes we could sell some of them for firewood.

Where trees were too thick to make good growth we would sell some of them to the farmers at reduced rates. They used them as poles for corrals or house logs. Some old, mature trees were purchased by the farmers to make "shakes" (shingles). They would saw them into blocks about two feet long and split them into thin boards and nail them on their roof.

I sold house logs to one man who built his house but forgot to put any windows in it. I was by his place at noon on a clear day and he had to light a lamp to see to eat.

On a logging operation, after the trees were cut down and the limbs trimmed off they were sawed into logs from 10 to 16 feet long. The logs were then separated by moving them so both ends would show clearly, then I would come along and scale them to determine the number of board feet in each log. The purchaser paid for them by the board foot. This scaling (measuring) was done with a "scale stick" which is something like a yard stick. One merely measures across the small end of the log and the stick shows the board feet, except one must make deduction for rot, curve or other defects that show.

In later years this method of marking, scaling and brush disposal was changed to a much faster way. The "slash" (limbs, tree tops, cull logs, etc.) was pushed into huge piles with a bulldozer and burned. Only about ten percent of the logs were scaled, just enough to get the percentage of defect in the area. The trees were measured for diameter and height while standing, to get the gross volume. The defect that showed in the ten

percent that was scaled was then taken from the gross volume and that is what the purchaser paid for.

At the time we started fencing the various cattle allotments over the forest, we hired a local man by the name of Jack Chilton (who happened to be from Texas), to be foreman. He owned a farm on Government Prairie. Jack was an easy going type that had a lot of experience at various things. He knew how to get a lot of work out of his men and still keep their good will and respect. He built several hundred miles of fence every year for several years.

One summer Jack and his men were camped near Kendrick Park. His crew consisted of seven or eight men, mostly from Texas. One Saturday night five or six of his men went to a dance at the nearby school house. They stood around the wall looking at the dance. Finally, two or three of them started dancing with some of the pretty girls. Some of the local boys didn't like this and decided to run the strangers off. They ganged up outside, worked themselves into a frenzy and went back in the house with fight in their eyes and one of them said, "Where is this damned fence crew?" The largest of the Texans stepped out from the wall, rolling up his sleeves and said, "Right over here." The gang stopped, sized up the rest of the fence builders and one by one disappeared out the door. This pleased the young girls and they showed the new boys a good time the rest of the dance.

Late one summer, Jack and his men were building drift fence on my district. They were about to finish the job and I told him I wanted him to build some telephone line from Pine Flat, down off the Rim to Sand Flat, a distance of about six miles. It was all right with him and he began planning the work. He would have to go home and leave some of the fencing equipment and pick up other things from the warehouse in Williams. Some of the men had their families camped with them and were making their plans. One guy said all he had to do was to "get in the car and call the dogs." I thought that was making it pretty simple.

We hired a man to cook and we all met at the Pine Flat cabin to begin the telephone line. There was no road from Pine Flat to Sand Flat and the wire and equipment had to be packed on horses or mules. Jack had done a lot of packing into the Grand Canyon and so had the cook. That night, before the work started, they were telling about the different and difficult things they had

packed, like water pipes, wagon wheels, etc.

The next morning I went ahead with all the men, except Jack and the cook, and started trimming out the route for the telephone line. Jack was to pack the wire on one of his horses and catch up with us. The outcome was, he got the cook to help him tie the wire on the horse and started out. The horse began bucking and got the wire tangled and twisted around his feet and fell down and they had to cut the wire in several places before they could get the horse up. As a result, most of that roll of wire was wasted. That night when everything was quiet around camp I asked, "Do any of you fellows have anything you want packed, I know a couple of experienced packers you can get to do the job." Anytime packing was mentioned around camp, it always brought a laugh.

One Sunday, and the following day which was Labor Day, Fred Merkle and I made a trip down Sycamore Canyon. This is a big, rugged and rough gorge running from Garland Prairie on south to the Verde River. There are a few trails leading in and out of this canyon but it can only be traveled the entire length on foot.

Our wives took us to the head of the canyon Sunday morning and were to pick us up Monday afternoon at the end of the road, on the west side of the canyon, about 15 miles further down. We carried a light bedroll, some food, a frying pan and a coffee pot. This is a long, hard, four day trip, so to complete our journey we would have to make a second trip as we had only the two days to spare. The following year we went in the canyon where our wives had met us and continued on down to where the canyon flattens out below the rim. There we turned back and went up a side canyon called Lee Canyon and found an easier place to climb out.

The floor of the canyon was covered with loose boulders of all sizes, worn smooth by the water during flash floods. There were water holes and running water in places but it would sink in the rocks and gravel and come up further on. We came to where the water had cut out a deep hole between two narrow walls of rock that extended straight up for about 200 feet. This hole was full of water and there was no way we could get past, so the only thing we could do was take off our clothes and swim and carry our belongings. This was about 100 feet across. We dressed and walked a short distance around a bend and there was another hole and we had to strip and swim again.

About dusk we found where a deep wash coming in

from the east side had dumped a lot of silt and sand and decided that would be a good place to camp that night. It would have been all right if we could have found a windbreak. We built a good fire and piled up wood to last all night, and it was a good thing we did because during the night the wind blew down the canyon (as it always does) and we got pretty cold. I awakened several times during the night but would tough it out until Fred got up and threw on more wood, as I knew he would.

The second trip we were further down where the canyon got rougher and wilder. We saw several bear tracks so fresh they showed wet on the dry rocks. We also saw a mountain lion track. We spent the night in a big cave that had been used by prehistoric cave dwellers. We found some arrow heads and a bone needle. We had a wonderful trip, with beautiful scenery of rock formations and wild nature.

I was back at the cave years later, but rode up from below with Shorty Auman and Paul Moore. On this trip we found a natural bridge across a deep creek that was high enough to ride under, but it was impassable on account of the brush growing underneath.

During the depression of the early 1930s, the Roosevelt Administration established the Civilian Conservation Corps, most commonly called the CCCs. It was intended to give employment to young men and get them off the streets rather than show a lot of work accomplished. The Army was to clothe, feed and furnish them quarters and medical care. The Forest Service would supervise their work, if they were on a National Forest.

When we learned that the Tusayan Forest was to get two camps, there was a big rush planning something for them to do. We had plenty of work that needed doing but they would have no tools, other than picks and shovels and this put a limit on the kind of work they could do. Later they got all kinds of heavy equipment, road machinery, etc.

Supervisor Kimball called me and said, "You have been wanting a road up Volunteer Mountain, you better get over there and stake out a route and we will put the CCC boys on it." I told him, "I will need a man to hold a rod so I can run a grade line." He asked, "Isn't Ruby going with you?" I replied, "I suppose she will if I go over there in my car." He said, "Well, she can help you." She did help me. We spent over a week climbing around the mountain side, through brush and trees trying to find the best route. We first tried the west

side but on every grade we would run into a high rock cliff. We finally gave that up and went to the north side and after several runs, got a good route staked out on a five and six percent grade, up to the first saddle below the top, about 250 feet from the cabin.

Finally the day came when the two camps were to arrive. One group with Army personnel and Enrollees would come by train to Williams and the other would come to Bellemont. Assistant Supervisor Doherty and I were to meet the one at Bellemont. A camp site had been previously agreed on, in an open flat about two miles south.

We had two trucks with drivers waiting at the railroad, to haul their equipment. The train was an hour late. Mr. Doherty had walked up to the station to inquire about the schedule, when it stopped at a siding some distance from the station. I looked up and saw Mr. Doherty coming as fast as he could run with his hair on end and his coat-tail sticking straight out behind. He was in charge and had already met some of the Army men, so all I had to do was play second fiddle. We took the Captain, Lieutenants and Doctor in our car. The Sergeant brought the enrollees on foot.

The camp site looked forbidding in the hot sun. Mr. Doherty pointed out some large pines a short distance further on and remarked to the Captain that they were welcome to make their camp in those if he cared to. We drove on and looked at the pines with their good shade and the Captain decided to make camp in them.

The Sergeant and the men soon arrived and all started setting up camp and cooking supper. The Major came about an hour later and wanted to know why they never camped in the place he had chosen down in the flat. He bawled everyone out and said he wanted them to move early the next morning. I spoke to Mr. Doherty loud enough for the Major to hear me and said, "I would like to be in the Army, if I were a Major." I realized it was none of my business and that we must get along with the Army in this new undertaking and that this was a poor way to start, but I just couldn't stand to hear an old bully show his authority when I knew he was wrong.

The next day they did move down to the hot dusty flat and we piped water to their camp. They stayed there only a few days then moved back to the trees and made a nice permanent camp. After they were ready to go to work, one of my first jobs was to take a foreman and his men and get

them started building a telephone line to the camp.

In a few weeks they got some heavy road equipment and built the road up Volunteer Mountain that Ruby and I had staked out. They built a lot of other roads on my district and some fences. There was not enough work for them in the Bellemont area and as a result, we had this camp only one summer. The other camp, south of Williams, came back summer after summer and was a big help in getting recreation developments done, roads and a lot of fences built.

They were a great help on fires. Most of the boys liked to go to fires because we fed them good. I was amused at one boy we had on a fire. It was during mop-up and he was trying to cover burning chunks of wood. The ground was so rocky and hard that he could not shovel enough dirt. I heard him say, "The next fire I go to, I hope it is in a sand bed." I knew by this remark that he must be from Parker County, Texas. I inquired and found a number of them were. I asked if any of them were from Agnes. I was told one boy was from Agnes and we could call him Agnes. I looked him up and learned that his people lived on one of our farms.

One afternoon I went to a fire alone. It was on a

narrow, rocky point that extended out about 300 feet between two deep canyons. There were a few green trees, a lot of dead wood, pine needles and cones on this long narrow point and the burning embers kept rolling off into the canyons, starting fires below. I got it stopped but knew it should be patrolled all night. I went to a telephone and called the CCC camp for men to stay on it. It was dark when they arrived and when I guided them out on this narrow "razor back", all they could see was a few coals twinkling straight down under them about 200 feet below. They did very little moving about that night and were still there when I got back the next morning.

The CCCs continued until 1942, after the start of World War II. They did a lot of good for both the Forest Service and the enrollees. Those who had been in the CCC camps were better prepared for Army camp life than those drafted and forced to leave home on short notice.

The CCC was not the only work project we had for the unemployed during the depression. We also had the WPA (Work Project Administration). This was for older men as well as the young. The camps, if any, were not supervised by the Army. The men were used on "Public Work", such as camp ground development, roads, buildings, etc. They were



Figure 5. A CCC crew on the Kaibab National Forest takes a break to have its picture taken.

paid small wages but it helped them a lot when there was no other work to be had.

Over the years more and more land had been added to my district, the JD and Pine Flat country and some of Government Prairie, making it a pretty large district.

One spring, Ruby and I drove down to JD Dam and stopped at the cabin. It had been a rather dry winter and the water in the dam was low with lots of algae and old drift wood. We found some Arbuckle coffee left there by the cowboys the previous fall and decided we would make some coffee. While Ruby made a fire in the wood stove, I went out and got a bucket of water from the tank. We took one sip and that was enough. The taste stayed with us two or three days.

When we stepped out of the cabin, we sighted about 40 wild turkeys watering on the other side of the pond. Ruby had raised a lot of turkeys but had never seen any wild ones. I told her to slip down below the dam and up behind some brush and sit beside the trail that led to the water and I would try to drive them close enough to her so she could get a good look at them. They went straight to her and she sat so still they were not afraid of her. They just said "Put Put" or whatever it is turkeys say, and separated and went on both sides of her. She was really thrilled.

One Sunday afternoon I received a report of a fire west of JD Dam about five miles. I went through Williams and stopped to find someone to go along and help me with it. The only man I could get was a Negro that shined shoes in a barber shop on week days. We drove within about a quarter mile of the fire but had to walk the rest of the way on account of the rough ground. I got out of the truck and took some tools and handed some to the Negro and started out at a fast walk. When I got to the fire he was nowhere in sight.

I could see the fire did not amount to much. I raked a little line around it and went back to find my man. I kept walking and yelling and every time he would answer me but seemed to be getting further away. Finally 1 saw him coming in a run. He said he had been running and yelling, but thought 1 was a panther answering him.

We soon had the fire out and just to tease him, 1 told him it would be necessary for him to stay with the fire all night. He said, "No suh, 1 can't stay, I got something I got to do." I'll bet he wouldn't have stayed for \$1,000.00.

One morning I got a report of a fire about 75 yards off the highway across from Spitz springs. I took a bucket along, thinking I may want to carry water from the spring. When I arrived there was an old man sitting by a big burning log. He had a sack filled with something and a small bucket of water heating on some coals. I asked him what he was doing there, but he didn't answer. I said, "You have too much fire here. You should know better than to set fire to a big log that will burn for days. Get up and help me put it out." He asked, "What for?" I told him, "So this log will not set fire to the forest after you have gone."

There really wasn't much danger as the country was wet, but it may have dried out before a log that size burned completely. He was not violating any law, as he was only camping and the law does not specify the size of camp fires. However, if he should go away and leave the fire burning, which I was sure he would, then he would be violating the fire laws.

From something he said I got the idea he wanted to go to Phoenix. I knew he was a menace and wanted to get him off my district, like an old time Sheriff who sometimes wanted to get a bad man out of his town.

I said, "Come on I'll take you to town." He wanted to know, "What for?" I asked, "Don't you want to go to town?" He said, "That is what they all say, go away, go away." He lay back on his his sack and pretended to be asleep. I hit a big rock that was close to his head with my shovel. This startled him and he raised up and blew his breath at me like a bull snake. I said, "For a little I would knock you in the head." "Go ahead and kill me: that will be all right," he said.

All this time 1 was shoveling dirt on the fire. I told him, "If you don't get up and help me put this fire out I"ll take you to jail." He asked, "What for?" I told him, "For starting this fire." He said something about being fed in jail and that he hadn't eaten for three or four days. I told him, "You can't stay here." He said, "That is what a woman and kids told him, go away, go away." I told him, "Get up from there, I am getting tired of fooling with you." He just lay there and blew at me again. I asked, "Where did you come from?" He said, "That way", but failed to indicate any direction.

I told the old man, "There is a bucket in my truck, you go get it and bring some water to pour

on this fire. He asked, "What kind of water?" I said, "Spring water." Then I asked, "What do you have in that sack?" He just blew at me again. By this time I had the fire out and had been wondering what to do next. I sure wasn't getting any cooperation from him. I said, "Aren't you going to help me put this fire out?" He asked, "What for?"

I grabbed his sack from under his head and said, "Come on lets go to town" and started for the pickup truck. I got to the highway ahead of him, threw the sack in the back of the truck and stood there waiting for him. When he got there he was carrying his little bucket and a walking cane. I told him to climb in but instead, he started slowly untying his sack. I got as close to him as I could, thinking, "Old boy, if you start to pull a gun or knife out of there, I am going to see how hard I can hit you. But he carefully put the bucket in the sack and slowly tied it back. I jerked the cane out of his hand and he said, "I want that." I said, "You can have it when we get to town. I'll keep it up front for you." He slowly climbed in and I drove away.

The Assistant Supervisor, Bill Doherty, was always insisting that we arrest some of those who start fires and bring them in before the J.P. While driving in with this old man, I was thinking, now is my chance to show Mr. Doherty why we can't always bring them in. I drove up in front of the Forest Office and took the sack and told the man to follow me. I seated him in the front room and went back to see Mr. Doherty and told him, "I have a fellow in here who was camped by a large burning log. He has violated no law because he was still with it, but there is no doubt he would have left it burning and it may have spread after the country dried out a little."

Bill was the excitable type and jumped up and said, "Where is he?" and almost ran to the man and said to him, "What are you doing, trying to burn our forest?" The old man said nothing but blew at him as he had done to me so many times. Bill said to me, "He is crazy." I told him, "I know it." Bill spoke to the old man, "You can go now." The man said, "That is what they all say, go away, go away," and he started crying like a baby.

Bill went back to the other room and sat down at his desk. I followed him and asked, "I have him in here now, what do you want me to do with him?" He handed me a quarter and said, "Take him down to a restaurant and buy him something to eat." About this time the Chief Clerk came in and he too gave

me a quarter. I then turned to the old maid stenographer and asked her if she had 25 cents and she said, "All I have is a dime." I told her "OK give me the dime." I told them, "Now I will add another quarter when I get him to the restaurant and that should get him a pretty good meal." I then went back to the old man and said, "Lets go get something to eat." More tears came to his eyes and he said, "Thank you." I didn't have to pick up his bag this time, he brought it along. When we got to the restaurant, I ordered him a regular meal and paid for it. I had some change left and laid it by his plate and told him, "Here is a little more coffee money and the next time you camp, please don't make your fire so big." He just said, "Thank you." I never saw or heard of him again.

One afternoon about 6 o'clock, I received a report of a fire near the Railroad Section House at Chalender. I had seen the section foreman pass the ranger station on his way to town and I supposed they had been burning cross ties and had gone off and left them. Ruby and I got in the pickup truck and drove down there. The smoke was coming up on the other side of the tracks behind a high fill. I took my shovel and rushed over there and found an old bearded man stirring coals and scratching around the burning cross ties.

I could readily see there was no danger of the fire spreading but I said to old whiskers, "What are you doing, I thought you had the world on fire?" He replied, "I am killing stingers. They will kill the men who have been working here but they can't hurt me, I can repeat the spirit of the soul. If you can repeat the spirit of the soul they can't hurt you." I just said, "All right don't let your fire get away from you" and I went back to the truck and told Ruby, "It's just another old crazy man, but I don't think the fire will spread." The Sheriff's office picked him up a day or so later, down near Ashfork. He had run away from some mental institution.

One Thanksgiving, Ruby and I were returning from a wild turkey dinner in Flagstaff. On our way home, about 11 o'clock that night, we topped a hill a few miles east of Parks and saw a red glow we knew could be nothing less than a forest fire. We turned off the highway on an old road that led to a tumbled down log cabin on privately owned land. When we got to the cabin it was burning and the fire was spreading in the dry pine needles and grass. A spark had just ignited a huge log.

I grabbed my canteen and ran and poured water on

the log and quickly extinguished it. Ruby honked the car horn and I turned in time to see a man who seemed to come out of the burning building. The whole back of his shirt was on fire. I was afraid he would start running and I ran to him as fast as I could. Sure enough, before 1 could get to him he started picking up speed. 1 yelled, "Wait, wait, 1'll get it." He stopped and started clawing at his back and cried, "Oh! Jesus Christ." By this time I was pouring water on his back and burning shirt. When 1 had the shirt extinguished and saw how dirty he was, 1 thought, a little water would be good for him, so I poured the rest of it down his collar. This water was ice cold, 1 could hear the ice thumping around in the canteen.

The man started walking away and 1 asked, "Where are you going?" He replied, "I am going down here somewhere and go to sleep." "We have to put this fire out", 1 told him. He said, "It has already burned everything that is any good." I told him, "I am the forest ranger here and 1 want to stop the fire from burning the forest and you must help me."

l got an ax from the back of my car and cut a couple of limbs from a cedar tree. When I looked around he had his shoe off and was beating the edge of the fire with the sole of his shoe. I gave him one of the cedar branches and told him to follow me and beat out what fire 1 left. We soon had it stopped. I then asked him if he was going to stay there the rest of the night, and he said he would. I said to him, "I no doubt saved your life, now you can do something for me. When you wake up during the night, look the fire over and if it is spreading again, whip it out just as we did before." We went back the next morning; the fire was out and the man had gone.

One summer evening about 9 o'clock, 1 received a report of a fire at Nevin Siding, a few miles west of Bellemont. Located at this Nevin is a large volcanic cinder hill, where the Santa Fe Railroad Company got train loads of cinders to put on their tracks in place of coal cinders. 1 went to the fire alone and when 1 arrived a young man was there. He was a stranger to me and looked very much like a hobo. I asked him if he started the fire. He said he never and "was trying to put it out." He wouldn't volunteer any conversation and would evade my questions. He walked around in the coals and hot ashes where I would hesitate to go for fear of burning my feet. He would pick up burning chunks and limbs and throw them in the fire, then he would circle back through and pick up the same limbs and throw them back where they were in the first place. He would then lay down by a blazing log for a few minutes, then get up and repeat the same performance. I laid down in my car to take a nap, knowing I would have to wait until the fire partially burned down before I could cover it with dirt and completely put it out. I couldn't go to sleep for fear this nutty guy may decide to kill me and take my car.

I waited until he was out of sight then 1 slipped out of the car, taking my blanket with me and keeping the car between us. 1 went about 100 yards and lay down under a large pine and went to sleep. I slept a couple of hours and then went back to the fire. It had burned down a lot, but the man was still walking through the hot ashes. He asked me where the logging camp was. I told him and he left and I was glad to see him go. I had rather be alone anytime than be with a nut.

One summer I wanted to ride the country north of Bellemont. This would be too much ride for one day so Ruby and I planned for her to meet me at Bellemont in the evening with my bedroll, that way 1 wouldn't have to lead a pack horse all day. Delbert Thompson ran a kind of motel and eating place there. Ruby was there on time and 1 asked Mr. Thompson for a cabin. He said, "You don't have to pay rent, just throw your bed in one of those empty cabins out there." I did, then went back and he and I talked until about 10 o'clock.

When I went out to go to my bed, a young man had unrolled it and was in it sound asleep. I had noticed a hobo hanging around earlier and although it was dark in the cabin 1 was sure it was him. I kicked him in the rear and asked, "What are you doing in my bed?" He replied, "ls this your bed? 1 thought the place was vacant." 1 told him, "It was vacant until 1 moved in." He was fully dressed, except for his shoes. He sat on the floor and was pulling his socks together over the ends of his toes, preparing to put his shoes on. 1 said to him, "You don't have to leave, 1 have plenty of bedding for both of us." I threw the top of the tarp back on the floor and pulled the top blanket off the bed and handed it to him. He rolled up in both the tarp and blanket and in two minutes was fast asleep.

1 awoke early the next morning. The man was asleep, but sometime during the night he had kicked out of his hot roll. There was a loose board on the wall, 1 hit that and it popped like a gunshot and the fellow jumped about three feet into the air. 1 said, "Its time to get up, Bo."

He wanted to know, "Is it daylight already?" I told him, "Yes, it is time to start another day." He got up and pulled his socks together over the end of his toes again, put on his shoes, thanked me for the bed and left. I saw him later going over to the section house. I felt sure he was going there to beg for his breakfast.

One morning there was about two feet of fresh snow on the ground, all traffic on the highway had stopped. I was out shoveling snow away from the stable doors so I could get my horses out, when I saw a man trudging up the highway. He came to the barn and was about exhausted when he got there. He said he was a driver for the Greyhound Bus Company, and was stalled about three miles up the highway and had been there most of the night. There were four women and nine men on the bus and he wanted me to take my two horses and go get the women and let the men walk to the Ranger Station. In the meantime, he would like to use the telephone to contact the Bus Company. He then proceeded to pile on the living room couch and go to sleep.

I rode over and put two women on each horse. One of the horses was a little mean and didn't like to be ridden double (two people on him). I put the two middle-aged "girls" on him (they turned out to be old maid teachers). He ran sideways around me two or three times but I held on to the bridle reins. I didn't tell them he was not gentle. I thought if they should fall off in the snow it would be a soft place to land. The other two women were an old lady and her pretty grand-daughter, about 20 years old. One of the men seemed to have a little horse sense so I let him lead the gentle horse and I led the other and went in the lead. The men on foot straggled along behind in the trail broken by the horses.

Arriving at the Ranger Station, about noon, Ruby had a good meal ready and as they had not eaten since the night before, they were all starved and ready to eat. The young girl cried and moaned with her feet and legs being frost bitten and the men took turns massaging her limbs, sometimes with snow and sometimes without. Grandmother was the toughest of the lot and kept assuring her granddaughter that everything was going to be all right and said she was not cold. Our guests (?) spent the rest of the day tracking snow in and out, looking up the highway for the snowplow, looking for food, playing cards, drinking coffee and taking naps.

A while before supper time (thank goodness) a

snowplow was sighted, followed by a bus and a long string of cars. We all started out to meet the bus, which had stopped at our gate about 250 yards away. I was in the lead helping one of the old maids, who had an equilibrium problem and could hardly walk on the loose snowy trail. The men were busy helping the girl along. When they left we were happy. They had eaten most of our store of supplies, especially coffee, and had tracked melted snow all over the floors, and a new Navajo saddle blanket Ruby had given me for Christmas was missing.

The bus driver had "generously" given Ruby five dollars saying, "This is all I have." However, she later wrote the bus company and they sent her a check to cover the saddle blanket, but nothing more.

The Chalender District had a lot of land "listed" for homesteading when I went there. "Listed" meant it had been listed as more valuable for agriculture than for growing timber, grazing, or other purposes. It was often spoken of as being "open" for homesteading. Only prairies and parks without timber were listed and even some of this was too rocky to farm.

I kept a record of all listings and maps showing how they lay. The land was described by sections and parts of sections (legal subdivisions) and not by "metes and bounds." As a result, some of the places had a lot of corners. When anyone wanted to file on a homestead they could get the list number and legal description from me or the Supervisor's office, then file with the General Land Office. A lot of them would then come to me to show them the corners of the land.

They had to live on the land a certain number of months and cultivate a specified number of acres each year. If they didn't "prove up" on it within five years, the filing ran out and someone else could get it. One of the many duties of a ranger was to check on the homesteaders often enough to be sure they lived on their claims the required number of months each year and that they cultivated the number of acres demanded by the homestead laws. If they didn't, it was necessary for us to appear against them when they went to "prove up." Most of them filed on their claims in good faith, lived there with their families year round and cultivated more than required. Others just wanted some land and didn't plan to stay there but very little and do as little cultivating as possible.

The acreage cultivated was easy to check (we could measure that) but his living there the required time was hard to keep up with. They all had a house or cabin, that also was a requirement. They would spend a few nights there then be away for extended periods. I would make a note in my diary every time I went by, stating if he was there or if it appeared he had been there recently. I also made a habit of writing the date on a paper and placing it in the back of the cook stove, out of sight. If I came back a month or so later and the note was still there, I had good evidence he had not been there or he would have had a fire in the stove and burned the note. I would take the paper out and keep it as proof and date another and leave it, etc. If the paper was gone when I returned. I had to guess when he had been there and for how long. If it came to a court case they almost always beat us because they could get witnesses who would swear falsely for them.

Sometimes a pretty open flat on some cowman's range would be listed. He didn't want someone in there that would be stealing his calves or eating his beef, so he would pay all expenses and let a trusted cowboy file on the land, with the understanding that the land would be deeded to him after the cowboy got his patent to it. In the meantime, the cowboy could still work for him. This kind of residence was hard to keep up with, also, because the cowboy would be in and out all the time; mostly out. Then, when he went to prove up, he could get plenty of witnesses to help him.

One homesteader was living alone and I rode by to see if he was on his claim. He was there all right, I could smell him long before I got there. It had been so long since he had any water on him, his eyes were red and full of pus, his hands were black and rusty and the skin was peeling off his chest. He asked me to show him the corners of his place. I showed him piles of stones that marked the corners. I stayed on my horse and let the man walk, the horse wouldn't let him get close. I kept above-wind of him as much as possible but one time I was down-wind and the stench was so strong it almost knocked me off my horse. The horse wanted to get away from there as bad as I did and we left in a high lope, but I could taste that smell all day. He later gave up his claim and left the country and I never had to smell him again.

The Johnson Cattle Company was one of the large outfits that shipped from Williams. They followed the old western custom of feeding everyone who came around at meal time. This made it simple for

a number of the Williams City Dads to get a good fill at the "Chuck Wagon" and a certain few were always there to accept the hospitality. I suppose most of them had been cowboys in their younger days and still liked to eat sitting on the ground and drinking coffee from a tin cup.

Most of the roundup cooks seemed to think their jobs gave them a right to be cantankerous. Still, I suppose, they had to put up with a lot from the thoughtless men they cooked for. If they were camped in a house or out in the open, they had no choice but to get up early, start a fire and prepare breakfast, consisting of steak, gravy, biscuits, fried potatoes, dried fruit, beans, syrup and coffee. If it should be extra cold or raining, it just helped make him a little more ill-tempered. A little later, when the other men started getting up, it would be nice for them if they could stand around and warm by the cook's fire, but most of them knew better than to try that. Standing around in the cook's way will not be tolerated. I have seen them take after the men with a butcher knife, and with a lot of curse words tell them if they "want a fire to warm by, go bill-ye-one."

Most of the cooks take pride in their cooking and having it on time and plenty of it. They make an effort to have coffee ready when any of the men ride into camp, and this is one thing the cowboys seem to think they have a right to demand.

when the wagon came to Williams to ship, they always camped near the stock pens. I was there one time -- they had finished loading the cattle and the train had pulled out. The cowboys had fed their horses and put them away. Four or five of the men had changed to clean shirts and Levi's and came by camp on foot, headed towards town. The cook seemed worried that they did not stop for coffee and after they had passed he called to them in an old man's husky-throaty voice, "don't you boys want any coff-a?" One of them took time enough to half turn and say, "Hell no, we don't want any coffee." The old cook turned to me and said, "Let 'em go to hell, they'll go up there and spend every cent they got for old rot-gut."

In later years the Johnson Cattle Company sold to Perkins & Favor. They soon quit using the old "Chuck Wagon" drawn by horses and used a truck instead. They later became more modern and all the hands ate up town and returned to their nearest cabins to sleep. This change could be called progression brought about by better roads and faster cars and trucks.

I had a black horse I called Jim, because I bought him from Jim Smith. He was long legged and a fast traveler and smooth riding. He had very little sense, was mean and unsafe, but for getting someplace and back in a hurry, he was one of the best.

Ruby and I had been someplace on our horses and were about three miles from home, on our way back. Old Jim was slinging his head up and down, dancing sideways wanting to go home, but I had to hold him back with the other horse. I got mad and turned him around and around until he got dizzy and fell broadside. I was dizzy also and could not jump clear and he caught my leg under him. I didn't break it but it sure did hurt. I was able to get back on and ride home. Ruby was mad and said it was good enough for me. However, she called the Doctor from Williams. He said it was a deep bruise and for me to stay in bed two or three days. My leg turned black from my hip to my knee.

One time I went with Shorty Auman over on his district, to help paint the inside of the Allen Lake Ranger Station. We went in his old Dodge truck. We drove out the Grand Canyon Highway about three miles past Red Lake and turned off to the east. We had to break trail through about seven or eight inches of snow. We got there in the late afternoon and painted until night, then finished the next day about 4 o'clock and started home. The snow had crusted a little on top and made it hard to plow through. We hit a drift and got stuck and finally twisted an axle in two. Shorty got out and started walking away. 1 asked "What are you going to do?" He replied, "I am going to walk." It was seven miles to the highway.

I also started and it was pretty hard traveling, even in the truck tracks we made the day before. I had on heavy overshoes and when we reached the highway, which was clear of the snow, I hid my overshoes in the bushes. After we reached the highway, we had to walk two miles further to Red Lake. We arrived there about 9:00 p.m. and asked the man at the service station if there was anyone around who would take us to Williams. He said, "No, but I have a Model T Ford if either of you can drive it." I wanted to make a good impression so he would be sure and let us have it so I told him, "I was born and raised in a Model T and I am expert driver."

We started out to get it when he stopped and said, "I forgot, it doesn't have any lights on it." Then in a few seconds he said, "But I have a Coleman lantern, maybe you can hang it in front." We took the lantern, got in the Ford and took off down the highway, but the lantern hanging in front only blinded us. We didn't need it anyway because the road had been cleaned, but the sides of the road and the surrounding country was white with snow. This made it easy to stay on the road. The car was old with a canvas top and no side curtains. However, it did have a windshield. My hands soon became numb with cold and we changed and Shorty drove awhile. When he was driving I could warm my hands over the lantern which we kept setting between our knees, except when we met a car, then we would stop and hold it up so the driver of the other car would not run into us. We made it all right.

The next day we returned the Ford and took a big truck and towed Shorty's Dodge to town.

At this point in the full "Moose Memoirs" Clyde accepted a transfer to the Tonto National Porest. His duties at the Ashdale Ranger Station for the next 11 years make another good story. However, we are telling Kaibab stories here, so we will now skip over that part. We resume as Clyde tells Ruby that they will return to the Kaibab.

Ranger Olson and the extra men were left to finish the roundup and cattle count and to return the horses to the Dude Ranch at Cave Creek. I took my two horses and bed roll and rode home. A couple of miles before reaching home I met Ruby on her way to Cave Creek to get the mail and visit Margaret Adams. She was surprised to see me on the road but glad to turn back and start packing.

The following week was a busy one for us. The news that we were leaving spread among our many

friends and permittees. We had to attend farewell parties and shop in Phoenix for a couch and a new rug for the big living room at Grand Canyon. Ruby was thrilled over the stone fireplace that filled one end of the 30 foot room in our new Ranger Station. We had never had a fireplace in any of the other three Stations and we were anticipating many contented evenings, piling big pine logs in it.

Ruby had some chickens to dispose of and traded

ten hens to a man who had a Gem Claim in Bloody Basin. She got a belt with a silver buckle and mounted with blue and flower agates from his mine. I sold a horse to a dude ranch in Cave Creek. Since that time I have ridden horseback very little.

The Forest Service sent a large moving van out to get our household goods. The driver of the van could not understand why anyone would want to leave a place as beautiful as the Ashdale Ranger Station. The van left to go around by Phoenix. Ruby and I loaded our car with a few personal things, four hens and two cats and took a short cut through Bloody Basin and saved the 100 miles.

When we reached Williams we drove up in front of the old Forest Service office expecting to see some of our old friends I had worked with, and to meet the new personnel. But the place was closed and vacated. Jess Boyce, who lived next door, was outside working with his flowers. We spoke, but he kept working and I asked, "Where has the Forest Service moved their office to?" He replied, "That is pretty good when a Ranger can't find his own office." I told him, "I have been gone a while, about 11 years." He then looked up and said, "Oh, hello Clyde. I am sorry, I didn't notice it was you." Then he told me they had moved to the Bowden building in the next block.

We went in and met Supervisor Lessel, a fine man and an old timer and I knew I was going to like working for him. Sam Sewel was Assistant Supervisor in charge of grazing and Ed Grosbeck was in charge of timber management. All the other office force was new to us also. The only man we knew on the whole Forest was Ranger Wyche and he was not in the office at that time.

We drove on up to the Moqui Ranger Station, our new location, and unloaded our cats and hens. The van soon arrived and the driver said, "I thought the place you left was pretty, but nothing can come up to this, unless it is heaven."

The Ranger Station was just outside the Grand Canyon National Park and about five and a half miles from the village of Grand Canyon and Post Office. It was a beautiful place, high and cool, with a pine tree about three feet in diameter near the kitchen door and many other pines of lesser size spaced just right to make an eye pleasing landscape. There was no yard fence and the pines reached from the door yard for miles in every direction.

There were five buildings made of rose colored stone with walls two feet thick and a shingled roof. The dwelling had three bedrooms, a bathroom, kitchen and a large living room with a fireplace in one end. In the other end there was an attractive stairway leading to the third bedroom. There was a good-sized basement that housed a wood burning furnace that warmed the whole house. The office building had a bedroom, a bath and an office room. The driveways were surfaced with volcanic cinders. The large barn had stables, a tack room and hay storage upstairs. There was a three-car garage with work shop and tool room connected.

Before this beautiful station was built, the Rangers had two stations, Anita, about 20 miles south was used in the winter and Hull Tank, about 25 miles northeast, was used in the summer. Anita was abandoned and the house sold and moved. Hull tank was turned over to the Park Service.

This District was spoken of as the Grand Canyon Division of the Kaibab (formerly named Tusayan) Forest, because it was separated from any other part of the Forest by several miles of State, BLM and privately owned lands on the south, the National Park on the north, the Navajo Indian Reservation on the east and the Havasupai Indian Reservation on the west. It was a flat, fairly level country that could be covered by car or pickup truck and no horses were needed for ranger work. There were over 400,000 acres in the district. There was one steel fire lookout tower, 85 feet high, with a two-room cabin on the ground nearby. The Park Service had two lookout towers and we cooperated in reporting fires.

The old Ranger that had been here ahead of me was uncooperative with most everyone and to hide his lack of "know-how" and ignorance he was belligerent, rude and profane. This only made it more pleasant for me because it is a well known fact that it is better on a new Ranger to follow someone who was disliked than one who was respected and thought a lot of. This man's wife was the opposite; she was popular. She was very good on the piano. She once gave a party at the Ranger Station and had a lot of guests, including some of the Park Service personnel, for dancing and refreshments. I was told that her husband stayed in the bedroom and read and never showed up at the party.

We had been moved only a few days when I went in to the Park Service office and told them, "I just



Figure 6. Mrs. Clyde Moose, wife of the District Ranger, with a visitor at Moqui Ranger Station. Photo by E. L. Perry, July, 1948.

dropped in to get acquainted." The Chief Ranger introduced me to the heads of the different departments and then took me to meet the Park Superintendent, Dr. Harold Bryant. Dr. Bryant was very friendly, seemed pleased that I came by and assured me they would help me every way they could. He asked me to attend the Community Church. He explained that there was only one church building allowed in the Park, but all denominations attended the service each Sunday. At the present time the preacher was from the Methodist Church, but no one could tell what denomination he was, as no mention was ever made of the beliefs or doctrine.

The following Sunday we went to church. After the sermon was over we introduced ourselves and I told the preacher, "That was the best sermon I had heard in ten years. In fact it was the first I had heard in ten years." I could have been more honest and told him 15 years, but I didn't want to seem too barbarous. We attended pretty regular after that.

The population of the Village of Grand Canyon was about 500 in the winter but in the summer the

tourist rush made it necessary to hire more employees and the temporary help ran the population up to 5,000.

There was the large, sophisticated, El Tovar Hotel, the Bright Angel Lodge and the Auto Camp. All these were owned and operated by the Fred Harvey System through a concession from the Park Service. In addition to running the Hotel and Lodge, the Fred Harvey people ran buses to take people along the rim drives. They also took tourists down in the canyon on mules.

These were about the only places in the Park that kept people overnight. This gave the Fred Harvey people a kind of monopoly and it was not enough. People were turned away by the hundreds and had to drive all the way to Williams or Flagstaff for a place to sleep. There was a motel, cafe and curio store just outside the Park boundary, near the Moqui Ranger Station, that was under Special Use Permit from the Forest Service and they took care of some of the tourists, but even that was not near enough.

Highway number 64 branched off of Highway 66 two

miles east of Williams and ran to the "Canyon" and on east and connected with Highway 89 near Cameron. The Santa Fe Railroad had a spur from Williams to the Canyon. That was as far as the line ran and the Pullman cars would come in the mornings and set there all day and return at night. One tourist lady said, "Why, here is the end of the railroad tracks. I always did want to see the end of the railroad."

All these accommodations were brought about on account of the one great attraction, the Grand Canyon of Arizona. The gorge is over 200 miles long and from 10 to 20 miles wide and over one mile deep. At the little town of Grand Canyon it is 13 miles wide. It is one of the "Seven Wonders of the World." It is very colorful and no artist has been able to do it justice in a painting. In the bottom is the Colorado River, one of the largest and swiftest in the Nation.

Their first view affects different people in various ways. Some almost faint and gasp like they had been hit in the stomach. One lady said, "Hu! Is that all there is to it?" A man said, "Nothing but rocks." I will not try to describe it, good writers have tried and failed. I will just say it is very colorful and the colors change almost hourly.

There is a shortage of fresh water in the Grand Canyon country. For years the railroad hauled water in tank cars by the train load and had it piped over to the Village. Later a large spring, halfway down the canyon side, was developed and the water pumped to the top. Deep test wells had been drilled by the Railroad and at different locations by some of the cattlemen, but very few found water. The livestock men dammed some of the large draws over the country to catch surface runoff. Some never held while others may hold for years, then almost overnight the bottom would give way between the limestone and the water would disappear. All the ranchers had big tank trucks and hauled water to their cattle. Very few had to feed their cattle, even in the winter, but they all had to buy and haul water.

For the Ranger Station water supply, we had an underground concrete storage and gave a man a contract to fill the storage when needed. We had a pressure pump that forced water through the house.

When we moved we brought along an Indian metate (a stone used to grind corn, etc.) found in the Ashdale Ranger Station pasture. We placed it in

the back yard and kept it filled with water for the birds and deer.

Piñon Jays would come in great flocks and the small trees nearby would be blue with the birds. There were a lot of deer in the country and some of the tame ones from the Park would come drink out of the metate and even take bread or other food out of our hands. Hunting was never permitted inside the Park but was allowed on the Forest during the regular hunting season each fall.

Most of the District had been logged but there were some isolated patches of timber and some along the fringe of pines that ran down the draws into the piñon type. A sale was made to a Sawmill in Williams and Ed Grosbeck came up and helped me get started marking and tree measurement scaling. I enjoyed the timber sale work as 1 had not done any since leaving Payson. Most of the cutters were Negros and used large chain saws. Down where the pines were playing out and the piñon taking over, the trees were short and small and it worked me pretty hard keeping trees marked ahead of the 12 to 15 saws, but when I got into larger timber it was no trouble.

There were a lot of ancient Indian ruins scattered over the country where 1 was marking timber and the Flagstaff Museum had some men doing some excavating in the locality. When I would find a ruin that looked important, I would first pick up any arrow heads laying around, then go tell them and they would come dig in it.

At one place there was a rock formation all the way across a draw. At the lower end of this formation was a drop of about 15 feet and the earth was hollowed out underneath making a large room, something like a large shed with a rock roof. Underneath were signs of a camp fire that had been in use for quite some time. Also there were a lot of bones and dried and whitened deer skulls, most of them with antlers attached. 1 counted 15 heads. My supposition was that some previous fall, a number of Navajo Indians, while hunting piñon nuts in that vicinity, must have gotten snowed in and spent most of the winter there and killed the deer for food while stranded. I found no one who knew the place was there. At another time while marking timber, I ran on to an old tumble-down log cabin that no one seemed to know anything about.

The piñon's nut crop was not worth enough economically to justify their existence. The

trees kept spreading out into the open grassland and smothering the grass which was worth more than the piñon for either fuel or the nuts. The small piñon made beautiful Christmas trees and we sold them at ten cents each. We may as well have given them away, but if we allowed just anyone to come get all they wanted, some individual would have abused the privilege and left a big mess. To get rid of the piñon thickets at a faster rate, they were pushed down with bulldozers and chained down.

Some places there were a lot of cedar (juniper) mixed with the piñon. The cedars were good for fence posts and we sold them to anyone who would cut them, but the demand was small. The Navajo got some for their hogans (huts), but most of the time they could find them on their own reservation, closer to home. As a result the piñon and cedar were considered a pest on the Forest and efforts were being made to get rid of them.

The Indians, especially the Navajo, seemed to think it their privilege to camp and gather piñon nuts on the Forest, or elsewhere. They would bring their families, and to the cattlemen's disgust, they would bring their horses and dogs and stay as long as there were any piñons to pick up. They used them for food but gathered them mostly to sell. Babbitt Brothers of Flagstaff and Williams bought most of them and there were train loads of them some years.

Early one winter, a couple of men drove up from Phoenix to buy several hundred small piñon trees for Christmas trees. We drove in my pickup about 15 miles to a certain area to show them where they could get them. We kept meeting cars and trucks filled with Indians and I told the men they were picking up piñons. These men had a store in Phoenix and wanted to know if they could buy some of the nuts. (I have an idea they thought they could beat the Indians in a trade).

I proposed we drive by one of their camps and see if they could buy some. When we got to the camp, I told them, "You fellows wait here in the truck and I'll talk to them first as I know some of them." The Indians had made a kind of pole pen about three feet high, and over it they had stretched a few blankets, canvas and old rugs, making a kind of arbor. There were several squaws and some kids and one man.

I said to the man, "There are some fellows here from Phoenix that want to buy some piñon

nuts." He looked at me with about as much expression on his face as a calf would have, but never said anything. He was young and intelligent enough looking that I was sure he could talk English, as the Arizona laws compel them to go to school. With him was a smart looking little Squaw holding a crying baby. I asked him, "Is the baby sick?" He said, "Yeh, sick."

I wanted to get back to the subject of piñons and told him, "These fellows will pay you more for the nuts than Babbitts will, but if you don't want to sell to them it is all right." Then I slowly turned towards the pickup, when the Indian asked, "How much?" I replied, "I'll let you talk to them", then I want back to the pickup and told the men to do their own buying.

There were several small buckets filled with the nuts setting nearby and one of the men asked, "How much for your piñons?" The Indian did not answer. One of the men laid some money on the ground and said, "This for that" and pointed to the buckets of nuts. The Indian just looked at him. One man said to the other, "Offer him a little more." The man put two or three more dollars on the ground and again said, "This for that" and pointed to the nuts again. The Indian still said nothing but looked at the little squaw, but no expression passed between them. The man put more money on the ground. The squaw said something to her husband in "Navajo."

The Indian man picked up a long slender cloth sack that had twine strings tied along its side at regular, evenly spaced intervals. I supposed each one of these indicated a pound or two of nuts. Anyway, while the squaw looked on, he filled the slim sack with piñons, then poured them into a larger sack and kept it up until he had measured them all. Then without saying a word, handed the men the sack and picked up the money. We started walking to the pickup, when I heard the little squaw say something. The Indian man yelled, "Hey, sack." I told the man, "He wants his sack. You can empty the piñons in a box in the pickup."

The deal was not only amusing but it did me good to see the Indian get the best of the white man. It was a sure bet the nuts could have been purchased in Flagstaff or Williams for less money.

A few days later this same man sent a big truck from Phoenix to get the Christmas trees. I made out a permit and told the driver to come back by because I wanted to count them. When he returned I questioned him and he said he had only the permitted number. I then told him I did not have time to count them and let him take them on. I just wanted him to think I would count them to keep him from cutting too many and trying to cheat us.

No pets were allowed in the National Park and the kids living there were always delighted to come to our house and play with our cats. The four hens we brought up from Cave Creek scratched in the pine needles, ate pine seed and kept us in eggs all winter.

We had been at our new location only a few days when Ray and Elsie came over. They always enjoyed helping us explore a new district.

Ruby's niece, Evelyn, and her boy friend, were married about the time we transferred here and went to Sun Valley, Idaho on their honeymoon and said they would come by on their way back to Dallas. We were busy getting settled and learning the new district and almost forgot about them and failed to write them to come on. We received a telephone call from Evelyn saying, "Aunt Ruby, don't you want us? We are almost out of money." Of course we wanted them and when they got there I used Gordon on a big fire and had him help dig a ditch for a gas line. They were good sports and we enjoyed them a lot, as usual.

This district was a nice one for an old Ranger about ready to retire. There were only five permittees on the District and they were all big outfits and easy to get along with and fenced into individual allotments. The whole west end was permitted to the Havasupi Indians. They handled it under the advice of the Indian Service and it was never overgrazed and we never charged them any grazing fees. As a result, it required very little supervision from the Ranger, just an occasional inspection. Three of the other four permittees took their cattle off the Forest in the winter and could be counted when they came back in the spring. The fourth didn't have enough cattle to fill their permit anyway and did not need counting. Riding with a roundup to count cattle was never necessary.

The Havasupi Indians lived in a deep side canyon of the Grand Canyon. It wasn't as deep as the main canyon, but almost. It headed in the town of Williams and is locally called Cataract Canyon or Havasu Canyon. It isn't much of a gorge until it gets near the Indian reservation, then it drops suddenly and boxes up for a ways then widens out. Water comes out of the bottom in great quantities

and there are several hundred acres of fertile soil that can be irrigated. However, the Indians farm very little now. There is no road down to the Indian Village and all supplies have to be packed. There is a horse trail 14 miles long leading in from the east side (the side towards the village of Grand Canyon) and one eight miles long on the west side.

The Supervisor's office made plans with the Officers of the Indian Service that we get together and make a range inspection of the Supai Allotment. They would make arrangements with the Indians to meet us with horses at the top of the west trail and we all would go down and spend the night. There was a guest house, but no place to eat down in the Indian Village of Supai. We would have to take our own supplies and do our own cooking. We each would pay our part of the expenses.

The Supervisor and Assistant Supervisor met three Indian Service men at my Ranger Station and we all started out in two pickup trucks. We drove over most of the allotment, stopping often to make a close examination of the grass and range condition. The wind was blowing cold and strong and during one of these stops, 1 want around behind some brush, out of the wind, and started a fire and put my old black coffee pot on. All of the fellows indicated their approval by coming to sit by the fire.

First one then another of the Indian Service men began telling about the nice percolators someone had given their wives or that someone owned. I interrupted and said, "Well, I don't suppose you guys will drink coffee out of this old black pot." "Oh, yeh", they all spoke at once. I told them, "Now you don't have to drink it to please me, I have plenty of cold water here if you had rather have it." One said, "We didn't mean it that way." Another said, "Coffee sure is good on a cold day like this." Up to this time all had been on their dignity and aloof. This coffee break seemed to set everyone at ease and we started kidding each other and had a wonderful time.

when time came to separate, I asked the men, "Have we paid you all we were supposed to or do we still owe you something?" The jolliest of the bunch said, "You owe me something." "What is it?" I asked. "You owe me an apology for the way you have been treating me," he kidded. We separated with a strong feeling of friendship and with their promise to help see that the Indians did not abuse

the range they were using.

In the summer of 1950, Ruby's sister "Bug" and her husband, "Dutch" Shuler, came out from Dallas to visit us. The girls decided to make a four-day trip down to Supai. It being fire season, I could not go along. Dutch decided to stay with me. We called the Agent down in the Supai Village (he was a friend of ours) and he made arrangements for an Indian Guide to meet them with horses at the top of the west trail. The Guide turned out to be a reliable, silent, young Indian man, who was only interested in getting down to the bottom of the canyon.

Dutch and I took them the 50 miles across a rough road to where they met the guide and I saw them start down into the canyon on some poor but wiry Indian ponies over a long, scary trail. We kidded Bug for days about being scared and holding to the saddle horn with her eyes closed. This going down a winding, steep canyon trail was pretty frightening to a flat-country person.

The women met the Agent and his wife and were invited to supper the first night, then were given a neat little cottage that had at one time been the Agency. They were also showered with gifts of peaches, figs and apricots that were at their height at this season. In this warm, fertile spot, the trees were huge. They towered 40 feet or more and were supposed to be descendants from those planted there by some Franciscan Fathers hundreds of years ago.

The three nights and four days spent there were



Figure 7. The Havasupai Indian Agency on the Havasupai Reservation. In this undated photo the school house is at the left and the agent's house is at the right.

wonderful for them as they explored the Valley from the spring where the river started, five miles below the village where the several beautiful falls cascaded down the steep canyon floor. The Agent guided them on this trip to the Falls and was very informative and young (and was writing a book).

This reminds me of the tale the Grand Canyon Park Superintendent told of a budding writer back east. He had written for information on the Supai Indians as he "wanted to write a book on them, but did not have time to come out and visit them down in their canyon."

They visited many Indian homes, buying fruit and learning the way they lived, which wasn't too elegant as most of them lived on doles and dependent children welfare. The climate was none to conducive to hard labor. They saw groups of Indians, men and women, lolling under giant cottonwoods, gambling, playing a kind of craps of their own origin.

Ruby and Bug left early the fourth day and came out on the same old horses and with the same guide. As they had nothing but a saddle bag for their personal belongings, they could bring out very little with them. However, they got several empty egg cartons from the Agent's wife and in these they packed out several dozen figs, that exactly fit in the egg cartons' compartments. The delicious apricots were too juicy to handle on the long pack trip. Dutch and I met them at the appointed time, and they talk until this day about "The trip down into Supai."

They had spent the next to the last day walking across the swinging bridge and exploring the other side of the river. They stopped at an orchard and bought apricots and figs from an Indian who was lolling in the shade, sleeping and staring into space. They would hold out a paper sack and say, "How much for this full?" The answer was always "feefty cent" no matter what size the sack.

One incident they laughed about later; as they were walking along the river and rounded a bend, there was a big Indian Buck laying in the shade of a big tree, asleep, stark naked. The Indian never moved an eyelid, but he must have heard them coming too late to hide as he used his hand to hide a bit of himself. They got out of there in a hurry.

On this same afternoon they found there was no bridge across the river except back a couple of miles where they had originally crossed. They had about made up their minds to start the two-mile hike back to the bridge when they saw an Indian Squaw and her daughter coming across the river on horses. Having no money with them, they made a bargain with the mother to take them across the river, one at a time, for half the sack of apricots. This worked out and they thought it quite an adventure.

They had enjoyed a visit with the lady Minister from the Quonset church down in the little village. The hut had been flown down via helicopter as the only way down was the horse trail and there never had been a wheel in the canyon except an old tractor.

Ray and Elsie were out on a visit once when one of the local cowmen wanted me to count his cattle so he could borrow money from a loan company. I I thought he would enjoy asked Ray to go along. seeing the cowboys work the cattle. It would not take more than two or three hours and we would come back by their camp and eat dinner with them. I was sure Ray would like that for a change, but when we finished counting, the man said he would like to ride to camp with us in the pickup instead of riding his horse. When we got there, he got out and never invited us to stay. I knew he had a reputation of being stingy, but I had been around cow outfits for a good many years and I never heard of anyone not asking any person who happened by to eat, especially when one had been helping him.

From that time on we referred to him as "Mr. Bastard." Those were the most expensive meals he ever saved. Never again did I help him or do him a favor. If I had a chance to save him money some way, I would not do it. If I found one of his tanks had dried up and his cattle out of water, I wouldn't go out of my way to report it, unless I thought the cattle may die.

Sam Turner, the Railroad Station Agent, told a story about a tourist who came to him and wanted to know what time the train left to go down in the Canyon. Sam told him, "The train doesn't go down in the Canyon." The tourist argued, "Oh yes it does, I have a ticket on it." Sam told him, "I have been around here several years and if it goes down there I don't know anything about it." The tourist walked away but I am sure he did not ride the train down in Grand Canyon.

Another tourist went to the little hospital in the Grand Canyon Village and wanted to borrow some rope. He happened to be talking to the Doctor.

The Doctor told him, "We don't have any rope but we do have some large string." The tourist said, "The string will not be strong enough. I need about 40 feet of rope. A hospital has most everything and I just thought you may have some rope." The Doctor asked, "Would you mind telling me what you want with a rope?" The tourist told him, "We are staying at the Motel and have done our laundry and need some rope so we can hang it out to dry."

When we had house guests we always took them to see the Grand Canyon. While they were looking at it I would watch the tourists. They were there from all over the world, dressed in every imaginable way and doing many unusual things. The best entertainment for our friends was to take them to watch the "dudes" get off the mules when they came up out of the Canyon, after a long day's ride. Most of them were not accustomed to riding horseback and they would be sore and stiff and could not get off the mules. The Guide would assist them and they would simply fall off into his arms. Their knees would give way and they would sometimes fall to the ground and it would be several minutes before they could limp away.

When we first moved to the Anita Moqui District, Assistant Supervisor Sam Sewell came up and we drove over some of the roads to get acquainted with the District. We remarked about several old big burns in the piñon country. Ordinarily the piñon country will not burn, or if it does, it burns very slowly. We agreed, in our opinion, these thickets must almost explode when the weather and everything was just right, or wrong—as the case may be. I had been there only a few days when I found out the hard way.

I received a call from the lookout of a fire down in the piñon country and it was spreading very rapidly. On my way to the fire I stopped at a woodcutter's camp and got two men to go with me. We started building a fire line but the fire was "crowning" and jumping over us and our clothes were catching on fire and sparks were burning holes in our hats. We decided to go back to the pickup and drive up a ways to where the trees thinned out and maybe we would have a chance. When we got to the truck, a couple of young men were there. The said they saw the smoke and came to help. That made five men and I felt better.

We drove up ahead and found an open place and knew the fire would have to come down out of the trees, so decided to wait for it. A Park Ranger drove up with five Indians This made 11 of us and I knew we could handle it with very little trouble. The fire was coming about ten miles per hour and we did not have long to wait. When it ran out of trees and stopped crowning and started burning in the short grass, we soon whipped it out. It burned about 80 acres.

The Park Service employees were always good to help me on fires. They would send every man they could spare. Our own "Smoke Chaser" and I would have to hurry or they would beat us to them. We, in turn, tried to cooperate and do all we could, but there were only two of us, where they had many more.

Once there was a lightning fire west of the Ranger Station about one mile and I went to it alone. I had been there only a short time when a Park Ranger came with two Chinese boys to help. It was very dry and the fire was getting a good start and I was glad to see them. The lightning storm gained in intensity and traveled in a southerly direction. As soon as we got the fire stopped, I left it with the Park Ranger and went home to the telephone (this was before I was furnished a two-way radio for this District). I knew there would be more fires to take care of.

When I arrived home, Ruby told me there were several more. She had sent the fireman, Les Cravey, to one and Mrs. Cravey had gone on duty at the lookout tower and had reported five or six more down in that part of the country. I drove down where Cravey was, leaving Ruby to do the dispatching, and found he and the logging crew had the first one under control. He and I split up and went to different fires.

In the meantime, Mrs. Cravey reported still more fires. Ruby got the Park Service to handle a couple of them and called the Supervisor's office in Williams, but they had no one available, so she called Mr. Richardson in Flagstaff, who had a cattle permit in the area. He said he could get some help and called his son at his Indian trading post at the little town of Cameron. The son took some Navajo Indians and went to one of the fires. With Ruby's good management in dispatching, we got them all controlled without any large ones.

We had one permittee who did not cooperate so well. He had cattle on the Forest and some on private and State land adjoining the Forest. He was always burning brush, etc. on the private land and we would get reports of the smoke and either we or the Park Service would go rushing out the ten miles to his place to see what was burning.

We asked him to let us know before burning anything, but he seemed to think it funny to have us running out there. He had no telephone, but he was in town most every day and could have notified us of his intentions.

One day he went a little too far and set three fires on the Forest. He said it was his land. I was pretty sure it wasn't, but I did not have time to survey the land lines to find out. Anyway, it was unlawful to leave a fire burning when it would endanger the lands or property of another. The outcome was, he admitted setting the fires and the "J. P." fined him \$25.00 each or a total of \$75.00. He then tried to get good or to pull something to get me into trouble, I will never know which.

A week or so later, a woman at the Moqui Camp called that he had left a quarter of beef there for me. This was about the time the government officials in Washington were getting so much publicity for accepting gifts of fur coats, refrigerators, etc. I sometimes took gifts from some of the cattlemen with whom I was on very friendly terms and where I had a chance to do them favors not involving the government or my position as Ranger. I told the woman at Moqui Camp to keep the meat in her refrigerator, that I could not accept the gift. I then wrote the man and thanked him "his good intentions" and told him we were not allowed to accept gifts and for him to pick up the meat when he was over that way again. He seemed to understand and admire me for being loyal to my employer, although he did not say so.

One summer 1 hired a Mexican school teacher from Phoenix, through the Employment Agency. He was to be Fireman (Smoke Chaser), and his wife would be Lookout anytime he was away on fires. They had two children. They were a very smart couple, but not accustomed to the big outdoors. When we would have a fire I would go into great detail telling him how to get to it. Then I would most always start out myself. I would have it about out before he would find it.

Once Mr. Diaz had gone back to a fire he and I had been on the night before. I was away someplace and the Park Service Lookout called Ruby about a fire. She immediately called Mrs. Diaz who said she could not see any smoke. Ruby knew it was a big one and the smoke must be thick around her and she said to Mrs. Diaz, "Look behind you." Mrs. Diaz said, "Oh, yes, I see it now." By this time the Park Service had men on the way to it.

Once 1 had an "out of season" fire in Coconino Basin and Ruby went with me to it. We had to leave the pickup and walk about a mile and a half to it. It was burning in a dead tree and on the ground underneath. I made the remark that we needed a crosscut saw to cut the tree down before we could put it out. Ruby volunteered to go back to the truck to get it, while 1 covered the burning embers with dirt. Soon after she left the clouds began to get dark and thick and came rolling down off the Rim. 1 knew if it rained we would not need the saw and I worked as fast as 1 could trying to finish the fire before it started to rain.

Ruby should have been back by this time and I knew something had happened. 1 picked up my tools and started back in a jog and would yell every little while. It was pouring down rain when 1 got to the truck and she was not there. I yelled again as loud as 1 could and heard her answer a long way off in the wrong direction. 1 walked towards her and kept yelling and we finally met.

She had found the truck and picked up the saw and started back to the fire, then realized she was lost, but remembered my telling her, "If you ever get lost, stop where you are and I'll find you." That is what she did. When it started raining she got under a tree and waited there until she heard me yell, then she started to meet me and we both got soaked. I told her, "Carrying that saw around on your shoulder in an electrical storm was not a good idea, but I am glad to see you anyway."

Lester Cravey was my Lookout-Fireman most every year I was on this District. His wife, Mary, would go on duty as Lookout when he went to any fires. They were well adapted to the work. Les had run trap lines all over the country and knew every road and trail. He had some well trained lion dogs (hounds) and when not on the Lookout, took Dudes lion hunting. He told me of the time his hounds ran a lion in a cave. The entrance to the cave was so small he could not get in it. He took a pole and broke the hole larger and crawled back in there and shot the lion with a .22 caliber pistol. Another time he punched a mountain lion out of a tree with a stick.

After 1 retired and left the District, Les would not work for the Forest Service any more, but did work for the Park Service as Lookout on Hopi Tower. We later had some friends going from Azle to Grand Canyon and told them to look Les up and give him our regards. They drove to his tower, but he was very unfriendly until they told him 1

sent them, then he invited them in and made coffee and wanted them to stay longer.

Sometimes when counting cattle onto the Forest I had a feeling they did not have all the cattle with them that they planned to put on. They could slip a few more on later when I was not there to count them. After all, they paid by the head. If they were getting a loan on the cattle, then it was a sure bet they would have all they owned there to be counted. The more cattle they had the larger amount they could borrow on them. I would always try to count them when the loan company representative did. Sometimes the loan company would tell them they would take the Ranger's count. I was sure to get all of them then.

Dr. Harold Bryant was the Park Superintendent and a good one. His strong influence was felt beyond the Park Boundary into the neighboring towns of Williams and Flagstaff. He was a strong worker in the Church and stood for everything good and was against everything bad. He was the kind of leader a community like Grand Canyon needed. His wife, Amy, was also a leader of women. They did not dance, but attended all the dances; I suppose, as much to keep things running as they should as for any reason. However, when the orchestra started playing the Varsurvana, Dr. Bryant would get Ruby for his partner and I would get Amy. That was the only dance they tried to learn.

Howard Stricklin was Chief Ranger. He and his wife, Alta, were good friends of Ruby and me. Anytime 1 needed help, from high water to fire, he was always willing to come to my rescue. The Park Service did a lot of Mistletoe control and cut a number of large trees. They wanted to sell the logs but had no training in log scaling (measurement). I assisted Howard and taught him enough about it so he could get by scaling.

Carl Lehnert was another close friend of mine. I first got acquainted with him while attending the Ranger's training camp at Fort Valley in 1924. At the time we were at the Moqui Ranger Station he was Assistant Chief Ranger. He later transferred to Washington, D. C. and when we went there to visit my brother Frank, we also visited the Lehnerts. He was later sent back to Grand Canyon and died there.

There were so many Government employees around the Village of Grand Canyon, including the Park Service, Forest Service and the Postal Department, that a Chapter of the National Association of Federal Employees was organized. This is a

national organization and is instrumental in helping get legislation passed to benefit all Federal Civil Service workers. We had about 25 members. I was elected President of the Local Chapter for a term of one year. I had a good Secretary and the job required very little brain power on my part.

During the summer months everyone was very busy and there was very little doing in the way of entertainment for the local people. After school started over the country and the first snow fell, tourist travel let up and the social activities of all kinds got underway. Ruby and the wives of the hotel men and some others frequently played cards at the hotels.

The Rotary Club, of which I was a member, frequently invited the ladies for some special party. Ruby and I belonged to a Square Dance Club and enjoyed the dances. We usually danced in the Community Hall, but several times we held the dances in our Ranger Station barn. The tack room floor was covered with a large rug and the walls were decorated and tables and chairs were available for those who had rather sit and visit or play cards or dominoes. The dance was held on the second floor where there was plenty of room and the floor was slick from having hay bales dragged on it for years. Hay bales were around the room to sit on.

During the construction of the new highway by the Ranger Station, a lot of timber was cut and the brush piled and the logs left on the ground until they could be hauled. The brush was later burned, except about 15 piles near the Ranger Station, where I told the brush crew to leave them. Then one night after the square dance, we invited the crowd out to help burn them. We would set several piles and let them burn down then set some more. We served cake and coffee and sat around on the big logs and sang and told stories.

One evening about dark the Deputy Sheriff called me that a hunter was lost down in the Buckler country and he said he would like for me to go with him to look for the man because I knew the country better than he did. We drove in his pickup to where the hunter's pardners were camped and learned what time he was last seen and all the details of his becoming lost. He was believed to be in an area about six miles across but completely circled by a road. It was a cloudy night, very dark and the wind was strong and cold. However, it was dry and if the hunter had any way to start a fire, he could get behind

something out of the wind. While not as comfortable as home, there would be no danger of him freezing.

I suggested to the Deputy that we drive to the few vacant houses and ranches in the vicinity and drive over the road that circled the area where he was supposed to be and if we did not find him, we would go home and wait until morning. It just made sense that if he came to the road and did not follow it or stay on it but instead crossed it and wandered off, there would be no chance of finding him that night. I would have made a bet, that he was in that circle some place sitting by a fire.

The Deputy went back the next morning and the hunter was in camp. He had stopped when he found himself lost, built a fire and stayed there until daylight the next morning, then walked into camp.

The Deputy's pickup truck did not have a heater and he and 1 became very cold the night we were looking for the hunter. He had a severe cold and I caught it from him. He took pneumonia from the exposure and died a few days later.

One fall hunting season, about mid-afternoon, a man drove to the Ranger Station and said he and others had made camp along an old road about five miles south, and his wife had walked away and had not returned. They could not find her and asked me to help hunt her. I told him he could hire a Helicopter near by and that I thought that would be the quickest and surest way to find her before dark. He said, "That will cost me \$50.00." I didn't have much to say to that remark but I thought "If she isn't worth \$50.00 she is hardly worth my time looking for her."

However, I drove my pickup and followed him back to his camp to learn if she had returned while he was away. She was not there so we drove over an old back road to a cow camp where some cowboys were staying. They told us she had been there and one of their men took her to the highway and she caught a ride towards her camp. We returned to the hunter's camp and I asked the husband," Is your wife among those people?" "Yes, that is her standing by the fire," he replied. I told him, "Well, I'll be seeing you" and drove away.

Another time a man and a woman walked in to the Ranger Station and said they were lost, or their camp was lost, as the case may be. They told me they started out with the husband of the woman and became separated and they didn't know where the husband was, or their camp either. I questioned

them about where they were camped and learned they had driven off on some road about a mile, to a wire corral and made camp. I drove them back to the corral but stopped before I got close to the camp. I never learned what the husband said about their being "lost."

There were no bears in the Grand Canyon Park but there were lots of "mule" deer (the big kind) and the tourists got a big thrill out of seeing them. It was amusing to watch them. Sometimes when driving to the Canyon they would sight a deer feeding out in the timber about 300 feet away. They would slam on their brakes, grab a camera and snap a picture. Then half stopped, they would tip toe a few paces, about 50 feet from the deer, and snap another and so on until they ran out of film. The deer would then notice them and come walking right up to them expecting to be fed something.

At other times, if the deer happened to be close to the road, they would stop suddenly, right in front of another car, and all the doors would fly open and the passengers pile out like there had been an explosion and all go to feeding and petting the deer. There were signs all over the place telling them not to feed the deer, but they did anyway. The deer were extremely dangerous, especially the large bucks, even though they were supposed to be tame. They had a belligerent nature and their many pointed antlers were very sharp. They had merely to move their heads and the sharp points would split an arm or puncture a leg.

The public did not know it, but the Park Service would sometimes trap some of these old tame deer that were making a nuisance around the Park and truck them to some distant place where deer were needed, usually some other Park or Forest. There were a lot of deer on my District. It was not unusual to count as many as 200 during a day's drive.

All the time I was with the Forest Service, Ruby and I spoke of Texas as "home." The first few years we returned "home" no more often than every three or four years, most of the time on the train. When roads and cars were made better, we drove. The last few years we came back every year. We always planned to come back here to live when we retired. My sister was here and Ruby had five sisters in Texas. Another drawing card was, we had some land here. After my mother died we sold some land. Ray and I kept the old home place and the others kept different tracts and the four

of us together kept the "South Place" of $417\,$ acres.

We had seen so many old Forest Service men retire, and although they had known for years just about the exact date they would quit, the event caught them without a plan or aim. They soon lost their prestige and ambition and their fellow workers no longer showed them the desired respect or seemed to want them around. They were considered just another old man among the many. They became so depressed and sick at heart, they lived only two or three years. To prevent this from happening to me, Ruby and I began to make more detailed plans as the time of retirement grew closer.

To get full retirement, I had to be 60 years old and have at least 30 years service. I would have my 30 years service several months before I reached the age of 60. Most of the retiring Forest Service Personnel would take all their annual leave payments in one "lump sum" when they retired, but I had about five months leave coming and I wanted to extend it so as to make as many months service as possible. This would make my annuity payments larger.

During the war we were needed so badly on the job that we were not permitted to take all of our annual leave, but could save the unused days and let them accumulate and build up to as much as ninety work days. I built mine up to the 90 days and let it stay that way. After the war was over and things began to get back to normal, we were again allowed to use all our leave each year which was, by this time, 26 work days per year.

Before the end of 1953 we had our retirement plans worked out to the most minute details. I would take my 26 days annual leave beginning the first of December, 1953, and move to Agnes and prepare to raise beef cattle on the old ranch. Then, beginning about the first of January, 1954, I would start on my 90 days leave, which would carry me into May when I would sign my retirement papers. This way I would be on the ranch six months before retiring and these six months would give me this much more service to be credited to my time of service.

Ray and I owned the old "Home Place" and the 666 acres of land that went with it. Also, the four of us owned the "South Place" of 417 acres. This would make a pretty good little ranch and if some of the others wanted to sell some of the land, well and good. We planned to run cattle about 10 years, then I would be 70 years old and we felt we

should quit and really retire.

In the late summer of 1953, I traded our Chevy sedan for a pickup truck. I made some high side-boards for it to hold furniture. The moving van lines wanted too much money to move us from Grand Canyon to Agnes, Texas. We would be people of leisure (or so we thought) and could move ourselves, even if it took several trips. We sold some of our household goods, gave some away and threw some in the city dump.

The first of December, 1953, we very carefully loaded the pickup. We had everything so compact that the load could not possibly shift and tied a canvas over the load to protect it from the weather. Then I asked Ruby, "Where is the key to the safe deposit box of the Williams Bank? We will need to get into it to get our Government Bonds." She suddenly looked more tired, and with a deep sigh said, "It is in the dresser drawer in the bottom of the truck." We both were tired enough to drop, but there was nothing we could do but release the ropes that held the canvas and unload part of the furniture to get the key.

The next morning we got up early and put things away for the winter and I made out some office reports that needed to be done, then we took off for Texas. We stopped by the Supervisor's office in Williams and went to the bank and drew out what little money we had and took the Bonds out of the safe deposit box and turned in the key. We spent the night in Holbrook with our friends, the Palmers.

The next morning the ground was covered with about six inches of fresh snow and it was still snowing. We passed several cars that had skidded off the road, but our heavily loaded pickup stuck to the road. It was not only the furniture that made it heavy, it had an additional three or four hundred pounds of snow and ice stuck to its underside. The second night we stayed with the Wyches in Magdalena, New Mexico.

We stayed with Nola and Hansford the first few days, until Tez Stone, who had been leasing the place the past few years, moved out. We then moved into the old home we had left over 32 years before.

Except for a few leaks in the roof, the old house, which had been built almost 50 years ago, was in pretty good repair. The windmill and overhead storage tank were still in operation, but all the water pipes, both in the house and underground,

were gone. The Stone family had been carrying water from the windmill in a bucket. The first thing we did was to get about 75 feet of water hose and connect it to the water supply under the storage tank and tack it to the wall outside the house and bring it around to the kitchen and installed a kitchen sink. We then had running water in the house.

When we left Parker County in 1922, wagons and buggies were still used extensively as a means of travel. Automobiles were coming into use, but in going from Agnes to Weatherford one would seldom meet more than three or four cars on the road. Even in Fort Worth there was no traffic or parking problem, and no one even dreamed there ever would be. Arizona, being so sparsely settled, had no traffic and it is no wonder we notice and hate the congestion. Where we used to meet only three or four cars in a 20 mile journey, we now sometimes have to wait 20 minutes before we can even cross a highway. It seems the world is made for the young and there is no place for the old.

In February, 1954, the weather was pretty and mild so we drove back to Grand Canyon. I filled out my resignation papers to take effect in May, and I'll have to admit it gave me a funny feeling. We hired a large trailer to bring back more of our household goods. While we were there, the Forest Service transferred a young Ranger to take my place at the Moqui Station.

Wendell Culwell told me, a year before, he would give me my first bull when I got ready to go into the cattle business. I wouldn't let him forget this and as soon as the spring grass started coming, we drove to Grapevine to get our bull. While we were there we bought two cows with their little calves and borrowed his trailer to haul them home.

I could hardly wait to get started in the business, so I got Forrest Elam, a good neighbor, to go with me to the Fort Worth Stock Yards and help me buy some more. I didn't know enough about prices and the procedures of buying on the competitive market to risk my own judgment, but Forrest was an experienced buyer and trader and I knew I could trust him. We bought a load and he found a man that would haul them for us. We went back later and Forrest hauled them for me. Some of them were a sorry looking lot, but that was going to be part of the fun, building them up into a nice looking herd.

We were in a terrible drought and I had to buy a

lot of feed to carry them through the winter. One year I had to start feeding as early as August. The drought didn't break until the summer of 1957.

No matter how well one plans the management of a ranch, if it doesn't rain the plans just do not work. However, most years the rains came, the cattle were fat and the prices good. We worked pretty hard during the planting seasons, but enjoyed all of it. Ruby helped me every way she could, even running the tractor and doing some of the plowing.

Occasionally a cow would get sick and we would call a veterinarian and most of the time he saved her, but sometimes they died anyway. One fine cow died after being shot. One died from a snake bite. One had a calf and did not clean up well and died from blood poison. We had one that fell in the creek and injured her back. We got her out of the creek and propped her up on a scaffold for several days, but she got no better and I had to shoot her to stop her suffering.

We usually got a 100 percent calf crop and there is nothing more enjoyable than seeing a bunch of little calves running and playing; and there is nothing prettier than a white face calf staring at you with wide eyed innocence. It was fun training them to eat and to enter a "creep feed" pen. (A creep feed pen is one that the calves can enter to eat, but the opening is so small a grown animal cannot enter.)

Our original plan was to run cattle about ten years, after returning from Arizona. Not only that, but I got the feeling (by 1964) that it was unfair for me to be having all the fun on the ranch and my brothers and sister not getting much out of it. Ray had already deeded his share to his daughter, Rosa Lee. The rest of us were getting to the age where we did not need a ranch, so I proposed we sell it. The others agreed and we put a price on it and I put an ad in the Fort Worth paper, but got no prospects. We then turned it over to a Realtor in Springtown.

In February, 1964, they found a buyer who put up some money as a down payment and would pay the rest in cash the following August 15. But on that date he came around and said he could not raise the money, so the sale fell through.

Later that year, while working at the ranch, I felt some chest pains, but paid no attention to them and they soon passed. In a month or so, Ruby and I went to Red River, New Mexico, which is high



Figure 8. Ranger Clyde Moose, circa 1930, with his niece and nephew at Chalender. Photo courtesy of Charles G. Wright.

in the mountains, to visit a while and come back with her sister, Billie, who was there alone. While there, I had the chest pains again, but more severe. There was no doctor in Red River, but someone thought it may be a heart attack. We cut our visit short and came home and 1 went to Dallas to a doctor and he said it may have been an attack and 1 should be very careful and do no exertion. He did not want me lifting heavy sacks of feed and hay bales.

1 thought if we were going to sell the ranch right away, we may as well sell the cattle and stop working. Cattle prices were very low, but I found a man who wanted some nice cows to keep and I got a pretty good price anyway. It was a hard decision to make; we enjoyed ranching so much.

During the year 1968, the land was sold and all papers completed and money divided among us heirs. Mr. Worth Bogeman bought and paid for the land, but we held all mineral rights, which includes oil and gas royalties.

Now we are really retired, but I find plenty to do. I never have chest pains or any indication of heart trouble, but the Doctor warned me against just that. He told me not to get ambitious and exert myself. However, I do the yard work and saw wood for the fireplace.

In reading over these Memoirs and thinking about the past, I know I have had an interesting life.

I realize I am old and do not have much farther to go, but I know I am in much better physical condition than many my age due to the inheritance of a strong body and Ruby's care in feeding me the proper food the past 56 years.

If I could live my life over, I can't say I would do things much differently. One thing for certain, I would marry the same little, curley haired, brown-eyed girl if she would have me. She has been a companion, a sweetheart, mother, nurse and a business partner all these years. Now together, hand in hand, we are walking into the sunset.

Clyde Moose enjoyed a long retirement from the Forest Service. In addition to his cattle interests he saw a successful gas well brought in on his property. He became active in the Methodist Church, scouting and in local politics. Azle elected him to a two-year term on the City Council. Clyde continued to make his home near Fort Worth with Ruby. He lived there until he passed away in 1985 at the age of 91.

The Forest Service thanks Charles Wright, nephew of Clyde Moose, and the Moose family for providing the memoirs for publication.

TO HULL and BACK

Hull Cabin and the Early Grand Canyon Experience

Much has been written about the colorful men who explored in and around the Grand Canyon in the late 1800s. We can read about pioneers like William Wallace Bass, Pete Berry, Louis Boucher, Ralph Cameron, John Hance, and others. But the story of one of their contemporaries, William Francis Hull, has gone untold. This is the tale of Hull and the legacy he left to the area in the form of the cabins and barn that he built near the south rim. It is also the story of early Forest Service administration in a remote and rugged land. The Hull Cabin Historic District is located on the Kaibab National Forest about three miles southeast of Grand Canyon's Grandview Point (Map 1).

Hull Cabin is a three-room log cabin with a wide front porch (Figure 9). It is built of ponderosa pine logs left round and joined at the corners by V-notches. It has a gable roof with wooden shingles. A one-room storage cabin of similar construction is located next to it. North of the cabins is a large barn, made of massive, hand-hewn logs. The corners are joined by full-dovetailed notches. The buildings have no electricity, plumbing, or telephone service. Hull Tank, a nearby water reservoir, is an integral part of the property. These structures lie in a small meadow surrounded by old growth ponderosa pine. The appearance of Hull Cabin Historic District has changed little in the nearly 100 years since it was built. It has survived a century of change.

The south rim of the Grand Canyon in the 1880s was a remote place and largely without visitors. The Atlantic and Pacific Railroad, built across northern Arizona in 1883, opened the area south of the canyon to settlement and brought increased visitation to the scenic wonder. Nevertheless. the journey by horse or wagon over 60 to 90 miles of primitive dirt road from the railheads at Flagstaff, Williams, or Ashfork was not attempted Those who came to stay by many tourists. established ranches in the wide-open country south of the canyon. Others tried their luck at prospecting, where success was usually more fabled than real. Tourism, ranching, and prospecting --William Hull had a hand in each of these ventures while they were in their infancy at Grand Canyon.

Many details of William Hull's life are lost to

by Teri A. Cleeland

history. William, sometimes called Bill, was born in 1855, 1858 or 1865, depending on which source one believes (Coconino County 1889: Coconino County 1894; Coconino County 1899). We do know that the Hull family left Illinois for California in 1849, presumably to follow the gold rush west. Patriarch Phillip, wife Elizabeth, and sons Phillip Jr., Joseph, Frank, and William came to northern Arizona from California before the railroad did, in about 1880 (Arizona Champion 1888b). They settled over a wide area and became successful ranchers of sheep, cattle, and horses. By 1884 Phillip Jr. and William had established a sheep ranch where Hull Cabin stands today, about one mile from the rim of the canyon. In that year William led the first recorded guided tour of the Grand Canyon, bringing lumberman Edward E. Ayer and party from Flagstaff by wagon (Fuchs 1953:77).

John Hance, who then worked at the Hull's ranch, took the Ayer group down the trail he had just built east of Grandview Point (Hughes 1978:49). William Hull and John Hance became partners in the tourist business, conveying adventurers to Hance's cabin on the rim at the head of his trail (Fuchs 1953:77). This cabin, built in 1885, was only a mile north of the Hull's sheep ranch.

The Grandview area became the focus of tourism at Grand Canyon in the 1890s because the stage line from Flagstaff ended there. Visitors stayed at Hance's ranch, which evolved into a large camp of guest tents surrounding a log cabin dining room; or the Grandview Hotel, a two-story log cabin built by Pete Berry in 1897. Later, in 1906, Martin Buggeln bought Hance's ranch and built a frame two-story hotel next to Hance's original cabin. In addition to the buildings on the rim, a log cabin at Red Horse Tank, nine miles south of Hull Cabin, served as a watering stop and stage station.

Tourism was apparently a family affair for the Hulls. According to an 1885 newspaper: "Visitors to the Grand Canyon all speak in the highest terms of Phil Hull, whose hospitable ranch is the 'half-way' house on the new route [to Grand Canyon from Flagstaff]" (Arizona Champion 1885). This probably refers to the senior Phillip Hull, and his Cedar Ranch [now called Moqui Stage Stop] northwest of Flagstaff. The "new route" from Cedar Ranch to Grand Canyon was surveyed and built by William Hull, John Hance, and Silas Ruggles (Brown n.d.).



Figure 9. Hull Tank Ranger Station, May, 1925.

By 1888 William and his brother Phillip had attracted several financiers from the eastern United States to the canyon rim in an unsuccessful effort to find backing for a railroad line and hotel (Arizona Champion 1888a). William still transported visitors to the canyon from Flagstaff, at least until the stage company began operating between the two points in 1892. However, tourism was not a full-time pursuit for the brothers.

They continued in the ranching business, and in 1888 built a reservoir at their canyon sheep ranch. The newspaper article announcing its construction links tourism with the tank:

The accommodation provided for sight-seers is rather poor [at Grand Canyon], but parties who have recently returned from there report considerable improvement in progress now, according to a Flagstaff exchange. It is situated about a mile and a half east of Mr. Hance's place, the terminus of the wagon road to the Canyon, and consists of a huge reservoir, excavated and constructed by Phillip Hull, Jr., and his brother at an expense of about \$1,600 (Ibid).

As permanent water sources are extremely rare on the south rim, the reservoir fulfilled an important need. Known as Hull Tank, it supplied water for tourists as well as the Hull's sheep. This reservoir may have first been constructed by the Anasazi, prehistoric inhabitants of the area. According to the November 10, 1888 issue of Arizona Champion

The same spot had been used by ye ancients for the same purpose some years previous. ... The old walls, consisting in the main of original clay and earth, cut into straight and smooth, were as plainly visible as the day they were made.

Although they are rarely found, prehistoric well excavations have been documented in the region (see Colton 1952:19-20). Prehistoric sites in the vicinity lend credence to the theory that Hull Tank has an ancient predecessor.

The sum of \$1,600 for a reservoir, a huge expense in 1888, is truly a newsworthy item. Perhaps some of that sum was spent on building the Hull cabins and barn but, if so, the newspaper did not report

it. Tree ring samples taken from the cabin logs tell us that they were cut in the fall of 1887, so the cabin may have been built in late 1887 or 1888. The logs for the barn were cut in the fall of 1890 or spring of 1891. An 1891 inventory of the ranch reveals that, at \$2,825, Hull Tank was the most valuable part of the property. By comparison, the 400 acres that comprised the ranch lands were valued at \$1,000. The buildings had a combined worth of only \$650 (W. F. Hull Collection, n.d.).

All of the log structures in the Grandview area showed affinities to each other, probably because the early settlers helped each other with construction. The Red Horse cabin, which Ralph Cameron moved west to Grand Canyon Village in 1902, is strikingly similar in construction to Hull's barn. (This cabin is now part of the Bright Angel Hotel complex.) Both have hand-hewn squared timbers with full dovetailed corner notches. Hull cabin and Hance's cabin also shared similarities, with V-notched corners.

All of Hull's structures are carefully crafted buildings. Both the V-notch and full-dovetail notch are difficult and time-consuming construction techniques but superior to other methods like saddle notching. Since all cuts point down and shed water, they better withstand the ravages of rain and snow (Rock 1980:9). Log ends are cut flush with the sides of the building, further reducing exposure to the elements.

The barn is particularly noteworthy (Figure 10) because each massive ponderosa pine log was hewn square by hand and individually dovetailed. Even the rafter beams are joined to the exterior walls by dovetailing. The clapboarded gable ends on the barn are distinctive short lengths of hand-split boards different than typical full-length milled clapboards. Hance used a similar treatment on his cabin.

Soon after the Hulls built their sheep ranch improvements, William's brother Phillip died of a heart attack at the age of 41 in November 1888 (Arizona Champion 1888b). William continued on alone in the sheep business, and in 1889 he sold 1,597 head of sheep from his ranch (Yavapai County 1889). Hull sold off all of his sheep in 1893, according to a newspaper article: "The firm of W. F. Hull & Co. has been dissolved by mutual consent. They were engaged in sheep growing" (Arizona Champion 1893).

The land surrounding Hull cabin became part of the



Figure 10. Hull Barn on October 1984. The view is towards the southwest.

Grand Canyon Forest Reserve in 1893. We can only speculate on the impact of Forest Reserve status on Hull's business, but it may have figured in his departure. Marriage may also have motivated him. In August 1892, he and Alice Gertrude Hull registered at Hance's tourist cabins as being from San Francisco (Brown n.d.).

Hull served as Deputy Sheriff under Ralph Cameron for an indeterminate period beginning in 1891 (Coconino County 1891). He occasionally guided tourist parties to the canyon in the early 1890s, but he eventually left the entertaining of tourists to his friend John Hance and others.

Aside from tourism, there was another reason for Grandview's popularity in the 1890s; it was also the site of the most successful copper mine ever located in Grand Canyon. Between 1890 and 1907, the Last Chance mine below the rim on Horseshoe Mesa flourished. Tourists also found overnight accommodations on the mesa, located midway from the rim to the Colorado River (Hughes 1978:50, 55, and 68).

Although he was not part of the Last Chance operation, William Hull became active in the mining industry during the early 1890s, a time when prospectors were just beginning to explore the canyon's depths. One newspaper proclaimed that "Wm. Hull left last Friday for a two-weeks' prospecting tour to the Grand Canyon, where [he and his partners] will locate the richest mine in the world" (Arizona Champion 1891). Like his contemporaries, Hull probably found that paydirt was elusive, yet the fact that he stayed in the business for over a decade indicates some measure of success. He incorporated the Tusayan Mining

Company in 1892, and the next year he and partner L. H. Tolfree leased the Hance Trail, a seven mile descent to the Colorado River, for a period of five years (Coconino Sun 1893a). They soon discovered copper in the canyon, though how much is not known (Coconino Sun 1893b).

Hull continued in the mining business throughout the 1890s and in 1901 filed a claim on the Horn Creek trail which he constructed "to use for the transportation of minerals, supplies or passengers" (Coconino County 1901). The trail, if he ever did build it, is not visible today. He may have intended to access mining claims he'd filed across the Colorado River from Horn Creek Canyon, or he may have hoped to capitalize on a growing tourist trade willing to pay to use Grand Canyon trails.

In the days before the government sponsored public works projects, individual entrepreneurs often built toll roads and trails, financing such ventures (and hopefully turning profits) with tolls paid by users. Ralph Cameron did just that with the Bright Angel Trail, located east of the Horn Creek drainage. Cameron became involved in a decades-long court battle with the United States government over the right to control the trail. The story of Ralph Cameron and the Bright Angel Trail is told in detail by Douglas H. Strong (1978).

The year 1901 saw the arrival of the Grand Canyon Railroad, running from Williams to Grand Canyon Village, located some 16 miles west of Grandview and Hull Cabin. Tourists were now unwilling to make the long and arduous stagecoach journey from Flagstaff to Grandview. Although stagecoach trips along the rim kept the tourist facilities at Grandview running for several more years, the area eventually faded from popularity and the hotels shut down.

William Hull also fades from our historical view shortly after the turn of the century. It is not known what became of him, but he left behind his Grand Canyon ranch, still known by his name. Hull may have departed from the ranch as early as 1893, when he sold off his sheep and became involved in prospecting. The ranch eventually became the property of the federal government. In 1901, Forest Reserve officials notified Pete Berry that he could no longer draw water from Hull Tank for use in his Grandview Hotel, so it probably belonged to the government by then (Sandburg 1976:3).

The Secretary of Interior withdrew the cabins and barn for use as a Forest Service ranger station on the Grand Canyon Forest Reserve on February 21, 1907 (Kaibab National Forest n.d.). In 1908, the Forest Service built the third room on to the rear of Hull Cabin, using a design similar to the rest of the building. The massive native stone chimney was probably built at that time as well.

In 1910, National Forest land south of the Grand Canyon became the Tusayan National Forest, and Hull Tank Ranger Station served as an important administrative center. Rangers were responsible for a huge land area, which until 1919 included the Grand Canyon. One of the challenges facing Tusayan National Forest rangers in those days concerned private entrepreneurs and their exploitation of the Grand Canyon for tourism. The Forest Service established a management plan for the Grand Canyon area that replaced unregulated private businesses with concessionaires, and planted the seed of public stewardship that the Park Service followed with National Park establishment in 1919 (Hughes 1978).

In 1934, the Tusayan National Forest became the Tusayan District of the Kaibab National Forest, as it remains today. Rangers lived and worked at Hull Tank Ranger Station in the summer. In winter, they moved to Anita, located some 18 miles west along the line of the Grand Canyon Railroad.

George Reed was the first Forest Service ranger assigned to Hull Cabin, beginning his tenure as early as 1905 and remaining off and on at the station until about 1919. Reed carved his name and the date '07 on the inside wall of the barn. In addition to his other duties, Reed spent much of his time maintaining the property. He rebuilt Hull Tank and installed an elaborate system of pipes leading from the tank to the cabins and barn. Of Hull Tank he wrote to his Forest Supervisor, "It is the best holding dam I have ever seen regardless of its age" (Reed 1912). He repaired the cabins and the road leading into the ranger station, and probably helped install a telephone line between 1915 and 1918. telephone and pipe system no longer operate, although their remains can still be seen.

James E. Kintner followed George Reed as ranger at Hull Cabin and served there from 1919 until Arthur Gibson replaced him in 1924. Judging from Gibson's journal entries between the years 1927 to 1929, Forest Service rangers of that period had to be jacks-of-all-trades. They checked range



Figure 11. A view to the southwest at Hull Cabin near Grand Canyon, Arizona between 1901 and 1903. Photo from the Vary Collection, Courtesy Museum of Northern Arizona.

conditions, met with permittees, worked on timber sales, issued special use permits, cited trespassers, reported on homestead entries, built fences and telephone lines, and maintained buildings and facilities, among other things (Gibson n.d.). Gibson replaced the barn roof with the corrugated metal that still bears his name and address in black paint for railroad delivery.

Arthur Gibson stayed at Hull Cabin until 1930 when Bill Vogelsang assumed ranger duties. Vogelsang was ranger in 1940 when Hull Cabin ceased to be a ranger station. The Civilian Conservation Corps built a new administrative center in Tusayan near the Grand Canyon National Park entrance between 1939 and 1942, and the ranger was transferred there. Hull Cabin fell into disuse for the next several years, but probably sheltered seasonal employees occasionally (Bryant 1950).

This situation led to a proposed agreement between the National Park Service and the Forest Service to transfer ownership of Hull Cabin from the Kaibab National Forest to Grand Canyon National Park. Hull Cabin lies only a quarter mile south of the Park boundary. In the past it had lain within Grand Canyon National Monument, but it fell outside the 1919 National Park boundary.

The Park Service cited past boundary indecision as one of several reasons for transferring Hull Cabin to their lands. These included the cabins' park-like setting within a virgin stand of ponderosa pine trees, a prohibition against stock

grazing, and its status as the Hull Tank Game Refuge. The Arizona Game and Fish Commission recognized the area's importance as a deer fawning ground and watering place when it established the 14-acre refuge on September 1, 1939, but the refuge order was rescinded in about 1950 (Ibid). The Kaibab National Forest seemed agreeable to the Park Service request, but Congress never acted on the transfer and the Forest retains administrative control.

It is fortunate that the transfer never occurred, because the Park Service eventually destroyed every old structure on the rim in the Grandview area. The Hance and Buggelin structures were destroyed in about 1958 (GCNP n.d.). Buildings associated with the Grandview Hotel were razed in 1940 (Superintendent's Report 1941). Logs from the Grandview Hotel can be seen today in the Desert View Watchtower, for architect Mary Jane Colter salvaged them in 1932 to use in construction of the Kiva Room (Colter 1933).

The Forest Service ensured that the Hull cabins and barn would stand for another century when it stabilized the buildings in 1989 and 1990. Forest Service employees from throughout the west helped replace rotten logs in the main cabin and barn, replicating the original building techniques by using hand tools like adzes and broadaxes. Both cabins were reroofed with wood shingles to match the original materials. The crew used froes to hand split replacement clapboards for the barn gable end. The cracked chimney on the main cabin

was rebuilt.

The Hull cabins and barn remain the only standing structures in the Grandview area dating from the time when it was the Grand Canyon destination point. Their well preserved architectural qualities and dramatic setting draw the visitor

back in time to an exciting period when the beauty and resources of Grand Canyon were just being discovered by the adventurous. In recognition of its historic significance, the Kaibab National Forest nominated the Hull Cabin Historic District to the National Register of Historic Places. It was officially listed in October, 1984.



Figure 12. An undated (probably circa 1925) view of Hull Tank Ranger Station. The storage cabin can be seen to the left and the barn is on the right, behind the cistern cover.

An earlier version of this paper was presented at the 1987 Arizona Historical Society meeting in Flagstaff. This revised version was prepared in July 1990.

A VERY GREEN BUNCH of BOYS by Patrick J. Putt

On the warm summer afternoon of June 2, 1933, a train slowed to a stop in Bellemont, Arizona. As the doors to the Pullman cars swung open a horde of slightly confused-looking young men stepped down and stared out into the vast open meadows and woodlands of the Tusayan National Forest. Roosevelt's legion of recruits, known as the Civilian Conservation Corps (CCC), consisted of skinny, poorly educated, unmarried youths from Texas. Could any of these men, who appeared to have never held a shovel or a pickaxe in their lives, survive rigorous forest labor? If they could be trained, could projects be developed and accomplished that would be of value to the National Forest and local communities? Yet, other forest officials and local leaders had come to understand the potential worth of these men. The physical incarnation of the President's conservation and unemployment relief program was milling about in the northern Arizona sunshine. The local success of FDR's program, however, lay in the hands of a few pensive Forest Service employees and Army officers.

The purpose of this paper is to examine the work the Civilian Conservation Corps in the Williams, Chalender, and Tusayan ranger districts of the Kaibab (formerly Tusayan) National Forest. enabling legislation which created the Civilian Conservation Corps arrived on the scene so rapidly that many local Forest officials had to scramble to develop project lists to keep Regional supervisors happy and recruits occupied. In the spring of 1933, the CCC was primarily targeted for forest maintenance projects. However, as the program developed both federal and local officials realized that the CCC's potential went beyond managing the timber resources of forests. labor provided by the CCC," asserts Richard Lowitt, "forests provided community support because of their economic, conservation, and recreational contributions" (Lowitt 1984:74). Development of recreation sites and transportation networks, along with the proper management of timer and grazing resources, represented the best means by which to stimulate local economies ravaged by the Great Depression. An instrument of this economic diversification was the Civilian Conservation Corps.

The Kaibab National Forest and the communities located within its boundaries have always shared a symbiotic relationship. As the well-being of the forest increased, so did local economies. The significance of the CCC era on the Kaibab is that

it represents a turning point in forest resource management and marks the advent of widespread federal funding for recreation development.

Federal funds had been available for forest land management and recreation projects since the forest reserves were established in 1891; however. inadequate budgets and manpower shortages limited the amount of work accomplished on the Kaibab. The combination of New Deal funding and CCC labor put more men to work on the forest and for longer periods of time than during any previous period. The men of the CCC helped transform the Kaibab from strictly a timber and grazing reserve into a multiple use resource base. These changes would have an impact not only on the physical well-being of the Kaibab Forest, but the economic welfare of Williams, Arizona. No one -- neither the Forest Supervisors, Forest Rangers, nor the local town officials -- was quite sure what to make of Roosevelt's "soil soldiers" on that first day in Bellemont. But by the time the last CCC troops left Williams, eight years later, more conservation and recreation work had been accomplished by one organization than in any period in American environmental history.

The Setting: The Kaibab National Forest

Kaibab is a Shivwits Indian word which means "lying-down mountain." The aboriginal inhabitants of northern Arizona believed that the region's gently rolling plateaus and volcanic peaks were mountains lying on the sides (Tucker and Fitzpatrick 1972:196). Elevations on the Forest range from 5,500 feet above sea level on the Coconino Plateau to 10,418 feet at the summit of Kendrick Mountain. This variation in elevation fosters diverse vegetation. Forest grasslands and Pinon-juniper woodlands dominate the lower elevations while Ponderosa pine and limited species of fir prevail above 7,000 feet. The forest meadows are vegetated with a variety of native grasses, including gramma grass and bunch grass.

Since man first entered what is now the southern Kaibab National Forest, the region has been a natural transportation corridor. The Kaibab is located between two major geographic features, the Mogollon Rim to the south and the Grand Canyon to the north. Despite their beauty, these features impede north-south travel. The relative ease in which the Kaibab can be crossed brought man in contact with forest resources for generations. Aboriginals hunted and farmed in the area as early

as A.D. 800. Spanish explorers searched the region in the sixteenth century for gold and converts. By the nineteenth century, wagon roads and railroads crossed the gentle grades of the Coconino Plateau, opening the area to lumbermen, miners, and ranchers.

The forest's resources, numerous springs, and the construction of a transcontinental railroad in the 1880s all directly promoted regional settlement. Beginning in the 1870s homesteads were established near the Kaibab's reliable springs. Farming and ranching grew as new markets were opened with the construction of the railroad in 1882 - 1883. The railroad also encouraged the development of the forest's lumber industry. Lumber was necessary for railroad ties, as well as for fuel to power locomotives. By 1901, five sawmills had been constructed on the forest, the largest mill being the Saginaw-Manistee mill located near present-day downtown Williams. Although the Kaibab area was prospected for silver and gold during the late 1880s, the volcanic and sedimentary nature of the local landforms yielded few precious metals. Williams, however, eventually became the headquarters for several prosperous Grand Canyon mining companies (Coker 1978:11). Despite the tremendous growth in forest use, only a few men were employed by the federal government to oversee the tremendous task of forest resource management.

Early forest officials were met with open hostility by local residents. They were also poorly paid and were extremely overworked. At the turn of the century, a ranger's salary was as little as \$60 a month, out of which he had to buy his uniform, support himself and maintain a string of at least three horses (Tucker 1989:126-7).

Government control of local resources was not well received in the Williams area. The Williams News reported on September 6, 1898, that the establishment of a forest reserve in the area was an "evil deed" perpetrated by the government. The local sentiment towards the first federal forest official in the area, S. J. Holsinger, was equally harsh. Holsinger arrived in Williams in 1898 only to find the forest devastated from illegal timber cutting and overgrazing. When Holsinger began prosecuting forest violators, the Williams News concluded on September 17, 1898, that "there was one man in all of Arizona that - should he ask for bread in this section of the territory - will be given a stone instead and that man is S. J. Holsinger. Area residents already resented the government for withdrawing the best lands in the region when the reserves were established.

sending a "forest police officer" to Williams, Uncle Sam had added insult to injury.

Local opposition towards forest conservation and the enforcement of forest regulations remained strong when the Tusayan National Forest was established in 1910. Although 12 forest rangers were hired, they had to oversee a forest larger than some eastern states. Early rangers covered huge territories. Dividing the vast work amongst a dozen men meant each ranger was accountable for nearly 50,000 acres of forest land. Rangers, armed with an ax, pick, shovel, bedroll, food rations and a horse, were required to survey forest lands, inspect grazing and timber leases, and fight forest fires -- all for a salary of \$75 per month (Tucker 1989:139). The drastic increase in timber extraction and grazing during the early twentieth century out-paced the ranger's management abilities. To cattlemen and lumbermen, it appeared that the bounty from the forest would have no end. Despite this vision of inexhaustible resources and the industrious labor of forest officials, the region's economic tide was about to ebb. By the late 1920s, the condition of Arizona's economy was only matched by the environmental devastation of the northern Arizona Forests.

Northern Arizona and the Great Depression

The economic collapse which followed the stock market crash of 1929 quickly spread to all regions of the country and Arizona was no exception. "The state's industries had made great progress during the 1920s," asserts Jay J. Wagoner," but the 1930s depression was disastrous to all of them" (Wagoner 1977:296). Unemployment statistics in Arizona reflected the national average. Odie Faulk estimates that by 1932, one in every four Arizonans was without a job (Faulk 1970:235). The days of prosperity which the Williams area lumber, grazing and farming industries experience during the first three decades of the twentieth century had all but vanished by the time FDR became president in 1933. The source of the area's crisis, however, was caused as much by the forest's misused condition, as it was by national and state economic conditions.

Overgrazing, poor logging practices, and forest fires left the forest on the brink of environmental collapse. James R. Fuchs states that cattle and sheep were reduced on the forest from 145,000 head in 1912 to 96,000 head in 1930 (Fuchs 1955:122). Falling beef and wool prices further hurt area ranchers. Between 1929 and 1933, the

price of beef dropped from 9 cents to 3 cents a pound, while the value of wool plunged from 36 cents to 9 cents a pound (Wagoner 1977:297). Many ranchers gave livestock away to avoid feeding them. The amount of farm land under cultivation actually increased during the early 1930s. However, most of the crops grown were for livestock feed and, as the price of beef and wool dropped, so did the area's agricultural production.

By 1930, the majority of harvestable timber in the Williams area had been logged. What quality timber was left was located in rugged terrain in isolated areas. Gaining access to the remaining stands which could be economically harvested was becoming more difficult. The Williams News reported on June 6, 1930 that the "permanence of the lumber industry in Williams [appeared] doubtful without the development of portable sawmills or more logging roads.

The only economic sector to continually grow during the depression was tourism. Growth in regional tourism during the late 1920s and early 1930s is directly related to state and interstate highway development. The National Old Trails Highway (later U. S. Highway 66) was completed through Williams by 1928. The 1930 completion of a new oil-sealed road, running north of Williams to the Grand Canyon's Bright Angel trailhead, made Williams a regional tourist and transportation hub. By the early 1930s, automobile tourists surpassed the number of railroad tourists to the Grand Canyon.

Having witnessed the growth of other communities located along the National Old Trails Highway, local civic leaders began mapping out a strategy to lure travelers to stay in Williams. cornerstone to the merchants' strategy was recreation development on the national forest. There was only one major obstacle to the plan -where would funding be obtained to build recreation sites and construct access through the forest? According to Fuchs, the only project accomplished by area businessmen by 1933 to entice tourists was the publication of a Williams tourist leaflet (Fuchs 1955:129). No campgrounds, picnic areas or scenic drives had been constructed. As the Great Depression dragged on, it appeared that such improvements would be a long way off.

The physical condition of the Tusayan National Forest, like the economy of Williams, was in a state of collapse by 1933. Human abuse of the natural resources had left the forest with eroded

soils, clearcuts and slash piles. All of the region's major business activities were in a state of decline and unemployment rates reached all-time highs. The only potential economic element in the area was tourism, but neither the local communities nor the Forest Service had the funds to develop recreation facilities necessary to attract tourists. If an answer could be found for the area's economic and environmental crisis, it would have to be holistic in its approach. Such a solution would need to create jobs for the unemployed, correct the misuse of public lands, and stimulate local economies.

In 1933, FDR's New Deal program established the Civilian Conservation Corps. The CCC was Roosevelt's multi-purpose civilian army, enlisted to fight a multi-faceted problem.

Establishment of the Civilian Conservation Corps

Roosevelt addressed Congress on March 21, 1933, regarding the topic of unemployment relief. FDR proposed a plan which included the establishment of a broad public works program to employ thousands of jobless Americans. "I have proposed to create a civilian conservation corps," he announced, "to be used in simple work, not interfering with the normal employment, and confining itself to forestry, the prevention of soil erosion, flood control." In defense of the program, the President added that the work would be of "definite, practical value, not only through prevention of great present financial loss, but also as a means of creating future wealth (Nixon 1957:143).

On March 31, 1933, Congress responded to the president's proposal and passed "An Act for the Relief of Unemployment through the Performance of Useful Public Works and For Other Purposes." A. L. Riesch Owen states that the legislation gave FDR blanket authority to "restore the country's depleted resources and advance a program of useful public works to relieve the country's acute unemployment problem" (Owen 1983:93). On April 5, 1933, Roosevelt signed Executive Order 601 creating the Emergency Conservation Work (ECW) program.

The ECW soon became known as the Civilian Conservation Corps. The program was established for a two year period and was developed to carry out the objectives of Congress' Act of March 31. The program consisted of four major components:

(1) it created a Federal Relief Administration to

award and monitor grant requests; (2) established the Emergency Conservation Work Agency, which Robert Fechner would direct; (3) mandated the Secretaries of Agriculture, Labor, War, and Interior to appoint representatives for an advisory counsel to the CCC; and (4) appropriated ten million dollars to fund the program. The primary work objective of CCC enrollees was forest protection. However, the National Industrial Recovery Act, adopted by Congress in June 1933, expanded the role of the CCC by allocating an additional 25 million dollars for the construction of highways, roads, and trails (Steen 1976:260).

The summer work season was rapidly approaching and Roosevelt felt it imperative that the men be put to work as expeditiously as possible. With the program organization and funding secured, the Roosevelt administration set out to put 250,000 CCC workers in the field by July 1, 1933. The Departments of War, Agriculture, Labor, and Interior were charged with the task of meeting the president's deadline. "Within three short months," asserts John A. Salmond, "the CCC had developed from a statutory authorization to the largest peace-time government labor force the United States had ever known (Salmond 1967:45).

Selection of recruits was assigned to the Department of Labor. The Army was responsible for the physical conditioning, clothing, feeding, transportation, and camp construction for all Forest Service, recruits. The under the Department of Agriculture, was given the task of planning and coordinating work projects national forests, as well as on State and private The Department of the Interior was responsible for developing projects in national monuments, and Indian reservations parks. (Ermentrout 1982:9-11).

Enrollment was conducted at the State level through an agency and quota established by the Department of Labor. Recruitment was limited to physically fit, unmarried males between the ages of 18 and 25. Enlistment was for six months. In return, each person received food, clothing, shelter, and an allowance of \$30 per month. The CCC also afforded recruits the opportunity to learn trade skills and receive an education. Enlistment regulations required enrollees to send at least \$25 of their monthly allotment to a dependent. Enrollees were assigned to camps, approximately 200 men in size, throughout the country.

The CCC forced the participation of departments

not typically noted for their interagency cooperation. Regardless of disputes, discharges, and deflated egos, there were 274,375 men en route to CCC camps through the country as of June 7, 1922 (Salmond 1967:41). The destination of 170 of these men was Bellemont, Arizona.

Community Reactions: April - May 1933

No sooner had Roosevelt signed the ECW Act (on April 5, 1933) than word reached the Tusayan National Forest that a CCC camp would established on the Forest. On April 7, 1933, The Williams News announced that the Tusayan Forest Supervisor, G. W. Kimball, had been notified by regional forest officials in Albuquerque to make preparations for a camp of 150 to 200 men. The news quickly caught the attention of the Williams community. The town's initial reaction was a mixture of fear and skepticism. The idea of 200 unemployed men sent by the government to live in the forest was somewhat unsettling for the small northern Arizona community. "The Forest Service Officials are willing to accept responsibility of discipline during work time," the Williams News questioned, "but what about the rest of the day?" Concerns were further raised over (1933a). whether or not local unemployed men would be hired. The timing of the workers arrival raised doubts amongst locals. Recruits would still have to be trained and conditioned. "If the purpose of the CCC was to plant trees," residents questioned, "the planting season will have already passed" (Ibid). Williams was generally receptive to the idea of rehabilitating the forest, but the Tusayan CCC program appeared to be another example of the government's good intentions being undermined by poor planning.

The Forest Service confronted a more immediate problem than community skepticism. The first task for Kimball and his staff was to locate a suitable CCC campsite. "A common problem for forest officials in the West," states Paul A. Lawrence, "was providing an adequate water supply for the camps" (Lawrence 1983:18). The winter of 1932 - 1933 had been particularly dry and many of the forest's springs produced below normal flows.

To better provide water and accommodate forest-wide projects, Kimball decided to divide the recruits into two camps -- the main base to be established 20 miles southeast of Williams at J. D. Dam Lake [named for James Douglas], and the second to be located in the Bellemont area. J. D. Dam Lake appeared to be the most feasible location for the main camp. The 1933 spring runoff had

filled the reservoir and, once treated, the water could be used for cooking and bathing purposes. A camp location having been selected, Tusayan officials sat down to develop a list of CCC projects.

There was no lack of potential work projects on the Tusayan National Forest. Generating project ideas was not nearly as difficult as assignment of priorities. The Forest work programs were reviewed and approved by the Regional Forester in Albuquerque. Inasmuch as the CCC program was intensely scrutinized by townsfolk in Williams, Kimball was placed in the precarious position of having to develop a project list which would not only appease his superiors, but win local public support as well. Kimball proved to be as wise a politician as he was an effective forest manager. Realizing the influence of the Williams Chamber of Commerce on community opinion, Kimball met with the organization to "make recommendations over what might best benefit the forest and the unemployed" (Williams News 1933b). Kimball and Chamber of Commerce officials agreed that, in addition to reforestation work, "the most feasible project for putting a large group of men to work was constructing a road from Williams over the Mogollon Rim to Perkinsville and the Verde Valley" (Ibid). The projects list was forwarded to the Forest Service Regional Office in Albuquerque for approval. Forest Service Officer H. G. Calkins, in charge of reforestation projects in Arizona and New Mexico, approved the Tusayan's plan with the comment that "they [projects list] fitted in splendidly with the [CCC] program" (Williams News 1933c).

Selection of the Williams to Perkinsville road project transformed the public skepticism of Roosevelt's "unemployment army" into a flood of community support. The Williams town fathers had been attempting in vain to develop an all-weather road from Williams to the Verde Valley for decades. The new road promised to link the mining, ranching and agriculture economies of the Verde Valley with the Santa Fe railroad in Williams. Officials of the Saginaw-Manistee Lumber Company, Williams' largest sawmill, proclaimed the road would "strengthen the life of the Williams lumber industry for a number of years" (Williams News 1933d). Inasmuch as the Saginaw-Manistee's access to timber stands was becoming increasingly limited, the Williams to Perkinsville road would allow for timber cut along the rim to be hauled to the Williams mill. The road would also accommodate the construction of lateral logging roads into uncut areas, as well as increase access for fire fighting crews.

Williams' small-business community now viewed the CCC in a new light. The CCC meant economic development at the government's expense and a new source of revenue. The development of the new road meant that over 50 miles would be eliminated from the existing Williams to Verde Valley route. Until this time, motorists traveling from Williams to Verde Valley communities had to travel 20 miles west to Ash Fork, drive 54 miles south to Prescott and traverse 40 miles over Mingus Mountain to Jerome. A state-wide discussion was underway by the 1930s to construct a highway north from Phoenix through the Black Canyon. The citizens of Williams viewed the Williams-Perkinsville road as a potential link to the proposed Black Canyon highway. With the completion of the Williams to Grand Canyon road in 1930, community leaders believed Williams would soon be located along the state's primary north-south corridor to Grand Canyon National Park.

Merchants were convinced that the CCC camps would increase sales. Perishable food goods, lumber, and hardware would be purchased locally. In addition to the major camp supplies, the captive market of 200 men, with \$5 to \$15 per month to spend, would be forced to patronize local business. Kimball's project list changed Williams' perceptions from fear to hope. The coming of the CCC sprouted community optimism that Williams' economic rebirth would grow from out of the forest.

The Forest Service and Army and the Early CCC Days: May - June 1933

Tensions between the federal agencies assigned to implement the CCC, existed during early days of the program. Camp administration was the responsibility of the Army's 8th Corps, which directed camp operations in Arizona, New Mexico, Texas, Oklahoma, Colorado, and portions of Wyoming. Headquarters for the 8th Corps were located at Fort Sam Houston, Texas (Alison et al. 1986:29). Perry H. Merrill asserts that the Army "required speedy selection and preparation of all camps for reception of [CCC] units" in order to meet Roosevelt's July 1, 1933 enlistment quota (Merrill 1981:15).

In their haste to meet deadlines, the Army and the Forest Service often squabbled over minor matters, including camp locations. Army officials arrived in Williams on May 31 to review Kimball's proposed camp sites. A site that was acceptable to Army officials was selected two miles south of the railroad tracks near Bellemont. The exact loca-

tion is uncertain, but it is very likely that the camp was established near Hill Spring which is now on the Navajo Army Depot. Because the J. D. Dam campsite was nearly ten miles from the proposed Williams-Perkinsville road alignment, it was the consensus of Forest Service and Army personnel to relocate the camp closer to the new road right-of-way. Although Little Pine Flat was considered, getting water to the site presented a problem. Officials finally agreed to locate the CCC base in an open meadow six miles south of Williams in an area called Barney Flat due to the fact that water could be easily piped to the camp. For the time being, it appeared the Army and Forest Service agreed on something.

CCC Work Begins: 1933 - 1934

Little time was wasted in commencing work on forest projects. The CCC laborers were required to receive two weeks of training and physical conditioning. No sooner were the recruits "broken in" than they were put into action. By July, work progressed in all parts of the forest. Several CCC men from the Barney Flat camp assisted with

work on the Williams-Perkinsville road. The road work commenced south of the Williams city limits and was to proceed towards the Mogollon Rim. Truck trails, road building, fencing, and spring development were other projects started during the first weeks of the CCC. Bellemont CCC workers also began construction of a road to the summit of Volunteer Mountain. Barney Flat CCC crew members rebuilt the Bill Williams Mountain Trail.

Workers were employed to conduct a variety of reforestation and range improvements. A forest disease, known as "twig blight", was the focus of intense CCC work during the first season. The twig blight fungus developed in dead wood, so a concentrated program began to remove dead wood and snags from the forest. Along with the removal of forest dead wood there were projects for the eradication of mistletoe, prairie dogs, and porcupines. Mistletoe is a destructive plant which grows as a parasite on pine and fir. Rodent control was most prevalent in and around the Garland Prairie area. Prairie dogs were trapped, poisoned, or shot because of the destruction of grazing lands. Porcupines met a similar fate due



Figure 13. This undated photograph shows a CCC crew taking a lunch break on the Kaibab National Forest.

to their tendency to girdle trees 10 to 20 inches in diameter. Reseeding of grass was also carried out by the CCC. One of the early reseeding experiments was conducted in the overgrazed areas south of J. D. Lake road where CCC laborers planted broom grass seed.

As time passed, the coordination between Army, Forest Service, and workers improved. Forest fires were a particular threat during June and July. The advantage of having several work camps throughout the forest made fire fighting much more efficient than in past years. Fires that had taken days to put out, or were left to burn, were extinguished quickly. Projects that took one ranger weeks or months to accomplish were completed in days. Within a month, Army and Forest Service personnel took a collection of inexperienced young men and molded them into a productive work force. Forest Supervisor Kimball, addressing the Williams Rotarians in July, announced that the camps were "working out remarkably well." Relations between the Forest Service and Army had even improved. "At first there was some misgivings about the two branches having to work together," Kimball conceded, "but these misgivings exist no longer" (Williams News 1933e).

Community support for the CCC continued to grow during the autumn of 1933. At the request of several Williams officials, the Barney Flat camp was renamed "Camp C. E. Boyce" (No. F 28 A) after a pioneer Williams merchant and water developer. The commemoration of Boyce seemed timely as Tusayan officials announced in September that plans were approved for the expansion of the J. D. Dam and the construction of several "fish dams." The dam projects were viewed by many in Williams as providing a needed shot in the arm for the community. The Williams News reported that the new construction would benefit local cattlemen and represent a "great drawing card in the way of entertaining vacationists." Additional water impoundments would help to distribute cattle throughout the forest and eliminate overgrazing around existing water sources. Increasing the size of J. D. Lake and the creation of new lakes would promote tourism as well. "Add fishing, boating, and bathing to our summer climate," the newspaper editor predicted, "and people will come by the hundreds where now they come by the dozens" (1933f).

The first six-month CCC enlistment period expired at the end of September and, as the winter months approached, attention quickly turned to completing

projects and planning for the spring work program. Before Camp Boyce was closed for the winter, the regional office in Albuquqerque notified Forest Supervisor Kimball that \$30,000 in Public Works Administration (PWA) funds were to be allocated for the completion of the Williams to Perkinsville road. Owen states that the PWA "contributed funds for building of forest roads and trails to fight fires and for recreation" (Owen 1983:85). The Williams News reported that the funds were to be used to hire a private contractor to build the road north from the Verde Valley. With the contractor building from the south and CCC crews building from the north, it appeared the road could be completed by the end of 1934 (1933h).

After the expiration of the first CCC period, 170 of the 200 recruits reenlisted. Those who decided to leave were given their pay and were transported back to Fort Sam Houston (Williams News 1933g). The CCC workers who stayed on were prepared for winter duties. All but 30 CCC men were taken down to the Verde Valley to work on road construction north of the Verde River. A crew of 20 men remained in Williams to work on timber stand improvements. Two fence crews were retained. One group was stationed in Ash Fork, the other was in Garland Prairie (Williams News 1933i). By November 15, 1933, the sound of CCC picks and shovels grew faint as the main body of workers moved south for the winter.

Big changes occurred for the administration of the Tusayan National Forest and the CCC in the spring of 1934. The journal "American Forests" announced that "less Army and more civilian supervision would mark the upcoming CCC period." The article stressed, however, that the "general supervision of the [CCC] by the War Department through its Corps areas [would] continue" (40:224-226). The reduction of Army personnel in CCC administration was to have no effect on the Williams area program. In early May, Army and Forest Service officers disclosed that Williams had been selected for the regional CCC summer headquarters. Captain Paolo Spereti and 12 to 18 officers were to be relocated to Williams as a direct result of the decision. The Williams News reported that the Community Hall would be remodeled to accommodate the new offices. It was further reported that the area to be administered by the office would include northern Arizona, southern Utah, and western New Mexico. It was expected that the office would handle "over 200 messages daily," which would probably result in Williams receiving the "second largest government broadcast station

in the southwest" (1934b).

Finally, Regional Forester Pooler disclosed that the Tusayan and Kaibab national forests would be combined into one unit. Merging the two forests resulted from Pooler's attempt to "simplify forest administration" and the "improved transportation facilities between the north and south rims of the Grand Canyon" (Williams News 1934b). The new forest would, henceforth, be known as the Kaibab National Forest. Although the headquarters were to remain in Williams, management would be turned over to Walter Mann, Supervisor of the former Kaibab (north Kaibab) forest.

Like both the Army and forest officials, the 1934 CCC work force was new. The CCC returned to Camp Boyce in May. The crew consisted of 198 members of CCC Veterans Company No. 1826. The company was commanded by Captain M. R. Eddy and all of the company's workers had been enrolled in the CCC for the past year. The Bellemont Camp was abandoned after 1933. Because of the experience of Company No. 1826, the Williams News speculated that "a

good deal more is expected to be accomplished in the six months they will be here, than was accomplished last year" (1934a).

Dam construction, road building, and spring improvement were among the numerous projects accomplished by the CCC during 1934. Shortly after the CCC arrived in camp, construction on the Williams-Perkinsville highway commenced. private contractor continued road construction north from the Verde Valley, while CCC crews worked south towards the Rim. In June, the erection of a dam was announced. It would be 37 feet in height and 105 feet in length, and be located 24 miles southeast of Williams. The proposed structure, known as the Kennedy Dam, would create a new recreation lake by impounding 625 acre feet of water. "The new lake would be equal to J. D. Lake as a fishing lake," asserted C. A. Long, the Forest Service Regional Engineer. The dam construction was completed in record time. Thirty-seven calendar days and 725 work days after the project began in late June, the rock and clay dam was completed.



Figure 14. Spring development at Summit Spring is viewed by Dan Best, Superintendent of the Perkinsville Camp of the ERA. Photograph by Charles Cunninghan; July, 1937.

In addition to the 16.7 miles completed on the Williams-Perkinsville project, the CCC constructed several forest roads in 1934. New roads were surveyed and graded. Existing roads received culverts and drainage improvements. The Bill Williams Mountain loop road and J. D. Dam Road were improved and a new road to Kennedy Dam was completed by the end of summer. Several miles of roadside cleanup were conducted along forest roads as well. Roadside cleanup projects involved trash removal, burning of brush, and cleaning out culverts (Anon. 1935).

The CCC conducted extensive improvements on three of the Kaibab's largest springs. Summit Spring, Bear Spring, and Hitt Spring were walled up, piped, and fenced to prevent destruction by livestock. At Summit Spring, 12 watering troughs were installed. At all three springs, CCC workers installed stiles in the fencing to allow visitors access to the water (Williams News 1934c). Tank improvements and barrow pit excavation were included in the water development projects undertaken by the CCC during 1934. Sand Flat Tank, Pine Creek Tank, and DT Tank were all improved under National Recovery Administration funds and CCC labor (Williams News 1934d).

By the time the third CCC period ended in October 1934, the Kaibab CCC had logged an impressive list of accomplishments. The CCC workers had erected a dam, constructed five buildings (a house, garage,

and three accessory structures at Camp Clover ranger station) and built a lookout cabin (Kendrick Mountain). Two camp grounds (Bill Williams and Williams West) were completed. They installed 25 miles of telephone lines, developed four stock tanks and improved five springs. Along trails they constructed or maintained 13 miles and constructed or maintained 142 miles of forest roads and truck trails. They also completed 31,300 acres of timber stand improvement and 231,200 acres of rodent control. This project information was obtained from the 1933-1934 Emergency Conservation Work Map for the Tusayan-Kaibab National Forest and the 1935 NIRA Improvement Report. Both documents are available at the Kaibab National Forest.

Roosevelt's Emergency Conservation Work program was scheduled to expire in April 1935. Residents living in and around the Kaibab National Forest no longer remembered their early fears of FDR's plan to build a government hobo camp near Williams. By September 1934, the CCC had been demonstrated to be a "splendid" idea. In a September 7, 1934 editorial, the Williams News stated:

Some may think that the unemployment program is about over, but that is wrong -- it is only well begun ... We as a nation cannot stand back and see the appalling waste of unemployment ... If private industry cannot find a way to use the unemployed, a way to let them



Figure 15. Camp Clover Ranger Station, on the Kaibab National Forest, photographed in 1936.

produce themselves a living, then the government must do so.

The fate of the CCC program was in the hands of Roosevelt and Congress. To show their appreciation for the contribution to the community, the citizens of Williams held a "pre-Halloween and Farewell dance" at the camp on October 26. The following day CCC Company No. 1826 closed down Camp Boyce and the members were transported to Phoenix Mountain Park for winter quarters. It would be several months before area residents would know if the CCC would return.

CCC Years: 1935 - 1936

The Williams Town Council and the Williams-Grand Canyon Chamber of Commerce met Forest Supervisor Mann in January, 1935 to discuss the Kaibab's upcoming CCC work season. Mann informed those in attendance that "the word was out that the CCC would be doing less road work and take on more tasks with a purely recreational value." public urged Mann to request two CCC companies for the 1935 work season. Despite Mann's message, the town council urged the "completion of the [Perkinsville-Williams road] and roads to the lakes south of town" (Williams News 1935a). Unfortunately, no CCC camps would return to the forest and no roads would be completed unless Roosevelt and Congress extended CCC funding past the April 1 deadline.

Enrollment in the CCC was at an all-time high in 1935 and Roosevelt's New Deal programs enjoyed broad public support. Writing to the CCC Director, Robert Fechner, Roosevelt said:

This kind of work must go on. I believe the Nation feels that the work of these young men is so thoroughly justified ... that the actual annual cost will be met without much opposition or complaint (Salmond 1967:57).

On April 8, 1935, Congress approved the Emergency Conservation Act and 4.8 billion dollars in conservation funds. The legislation continued the work of the CCC. The action aroused no complaint from the Kaibab National Forest and the City of Williams. "Work relief when on legitimate projects honestly conducted," stated the May 8, 1935 edition of the Williams News," will pay its own way." By May 16, the CCC was back at Camp Boyce.

The Kaibab's 1935 CCC campaign was a portrait in futility. In spite of increased federal funding and persistent requests by community leaders for

additional CCC crews, only one company was stationed on the Kaibab during 1935. The company, consisting of 200 men, was under the supervision of Captain McClain. The year's unusually wet winter and spring left the previous season's dam and road work in serious disrepair. Before further construction of the Williams-Perkinsville road could resume, workers had to remove extensive rock slides and debris, excavate ditches, and unplug culverts (Williams News 1935b). The wet weather also caused the Kennedy Dam to slump on its foundation and crack.

By the June 20 Williams Rotary luncheon, the dam had been repaired and the Williams-Perkinsville road cleared. Supervisor Mann announced that the final improvements to the road south of town had begun. "The [Williams-Perkinsville] road will be widened to twenty feet," Mann explained, "and five or six new concrete bridges will be put in between Williams and the river" (Williams News 1935c). Throughout the summer, work steadily progressed southward on the road. Unfortunately, most of the summer's road construction was in vain. In late October, torrential rains flooded the Kaibab. The worst flooding occurred in the Big Pine flat area. The Williams News reported that loggers in the area waded across Big Pine Flat in "water above their waist." Once again, rock slides and debris swept away much of the season's efforts. "The road was in no condition to withstand such a flood," stated the October 25, 1935 edition of the Williams News. The only accomplishments that could be attributed to the CCC in 1935 were the repair of Kennedy Dam and the completion of the dam at White Horse Lake. The hopes for completion of the Williams-Perkinsville road completion was washed away with the year's record rain. In early November, Camp Boyce was vacant once again.

Forest officials and community leaders were optimistic that the 1936 work period would make up for the setbacks of 1935. Company No. 2833 arrived at Camp Boyce on April 28. The 1936 CCC crew was the smallest group on the forest to date. Company No. 2833 consisted of only 160 men. "After providing cooks and camp assistants," explained Forest Supervisor Mann to local businessmen, "a force from 100-120 men can be counted on for field work" (Williams News The lack of manpower did not stop officials from planning an ambitious work plan. The focus of the season's work would be the completion of the Williams-Perkinsville road. Other projects included construction of a road to White Horse Lake, preliminary work on the West Cataract Dam, construction of a lookout cabin on

Bill Williams Mountain, and timber stand improvements (Williams News 1936a).

At the end of July, extensive headway was reported to be accomplished on the Williams-Perkinsville road and construction of a campground at White Horse Lake was near completion. Lightning-caused fires required considerable manpower. A 600 acre fire occurring south of Volunteer Peak required numerous Kaibab CCC crew members and crews from adjacent forests as well (Williams News 1936b). Forest Supervisor Mann reported to the Williams Rotary Club on July 30 that the camp sites, tables, fireplaces, garbage pits and latrines were completed at White Horse Lake. The big news, however, came with Mann's road work update. The Williams-Perkinsville road (Figure 16) was within eight miles on the Rim (Williams News 1936c). On November 8, 1936, the road was dedicated before a large crowd of government officials and local citizens. The men of Company No. 2833 did not get to attend the dedication ceremonies. They were en route to winter work in southern Arizona. "The fame of the road will grow with its use," said the Williams News, "and that is reward enough for the unnamed who worked so faithfully for its construction (1936d).



Figure 16. The Williams-Perkinsville road; photo by Rex King, August 31, 1937.

CCC Years: 1937 - 1938

Ermentrout cites "public pressure, publicity, increased acceptance of the CCC" as reasons for Roosevelt's decision to establish the CCC as a permanent agency in 1937 (Ermentrout 1982:47). In spite of increasing national attention, the CCC began to diminish as an effective forest labor force after 1936. The Act of June 28, 1937 elevated the CCC to permanent status, although the legislation restricted the "permance" to only three years. The major changes to the CCC resulting from that law was a reduction in the Army's responsibility in CCC operations, increased availability of CCC labor for military projects, a greater emphasis on vocational training and education, and a lowering of the minimum recruitment age from 18 to 17 (Ibid. pp. 48-49). Whereas the Army would continue to be accountable for camp management, the Act of 1937 placed a greater responsibility for CCC operations on Fechner, Director of CCC, and regional forest officials. It also brought younger men into the program and established mandatory educational programs in the camps. By 1937, each worker was required by law to receive a minimum of ten hours of educational instruction or vocational training (Keifer 1983:53).

After 1936, the population of CCC workers would gradually decrease and the number of new achievements slowly dwindle. The 1937 CCC work season continued the trend towards the use of smaller work forces. Despite rumors that the Kaibab might not be allocated a summer work crew, an advance detail arrived at Camp Boyce on July 18. The main body of the work force was a junior company consisting of 138 young men between the ages of 17 and 18 (Anon. n.d.a).

The factors of a shortened work season and an inexperienced work force did not prevent the Kaibab foresters from accomplishing needed forest improvements. In 1937, two lookout towers were constructed, including a new lookout on the summit of Bill Williams mountain. There were 1.75 miles of fencing erected, the majority of it around the White Horse Lake campground. Also, there were 105 temporary check dams built, 486 acres of range improvements, and 668 work days were spent maintaining truck trails. The season's CCC program was completed on October 22, 1937 and the crews departed Camp Boyce in early November (Ibid.).

The spring of 1938 found the forest and community leaders questioning whether or not Camp Boyce

would be occupied during the upcoming summer. Fears were relieved in late April when Forest Supervisor Mann advised local business officials that a CCC company had been assigned to the Kaibab. Among the numerous projects scheduled for work crews were the construction of a lookout residence on the summit of Bill Williams Mountain, construction of a lookout tower on Volunteer Mountain, maintenance of Williams-Perkinsville road south of Camp C. E. Boyce, construction of highway portal signs, and 500 acres of timber stand improvements (Williams News 1938a).

Mann's 1938 work plan was undercut by unforeseen crew reassignments. An advance group of 50 men from Company No. 3346 arrived in Williams during the middle of May. Due to the season's extreme fire danger, the men occupied a side camp at Spring Valley ranger station. The purpose for establishing the side camp was to fight the chronic range fires which were occurring in the grasslands east of Williams (Williams News 1938b). Eighty-five additional men from Company No. 3346 arrived at Camp Boyce on May 26. For reasons not explained, Forest Supervisor Mann announced on June 30 that Company No. 3346 would be leaving the Kaibab within a few weeks. It was beginning to look like little work would be done in 1938.

To the joy of both Kaibab foresters and local officials, 200 workers and Army officers reached Williams the first week of August. Camp F-75 from Pennsylvania, under the command of Captain Albert, arrived at the railroad depot to the music of the Williams High School band and a crowd of cheering residents. In what will be recorded as one of the most productive three months in the history of the Kaibab CCC era, Camp F-75 completed a list of projects ranging from turkey habitat development to cabin construction. From August to October workers took on a variety of projects. Lookout cabins were built on the summits of Bill Williams and Volunteer mountains. They completed over 3,800 acres of rodent control, conducted 180 acres of timber stand improvements, installed water troughs at Buck Springs, improved turkey habitat at Hitt Spring, and erected nearly 12.5 miles of fencing. They rebuilt four miles of the Bill Williams Trail, installed four forest service highway portal signs, and maintained 71.5 miles of truck trails and forest roads. They also spent 139 man days fighting forest fires and accomplished 225 man days of general forest clean up (Anon. 1938a and 1938b).

Between the years 1937 and 1938, there was an

overall reduction in CCC manpower and work. With the exception of Camp F-75's work output during the autumn of 1938, the achievements of the earlier CCC periods were not matched. After six years, the CCC was beginning to wind down. There would be one last important CCC era on the Kaibab and its focus would be recreation. This final chapter in the Kaibab CCC history would prove to have a lasting effect on the national forest, as well as on the City of Williams.

CCC Years: 1939 - 1941

Serious questions as to whether or not the lumber industry would continue to be a reliable economic base for Williams were raised within the community since the turn of the century. Next to lumber production, Fuchs asserts that tourism had become the second largest industry in Williams by the early 1930s (Fuchs 1955:148). Completion of Route 66 in the late 1920s, and the Williams to Perkinsville road in 1936, presented Williams with the potential to capitalize on this relatively new industry. Should the Phoenix-Black Canyon highway be extended north to the Verde Valley as predicted, Williams would be located at the hub of the two largest highways in Arizona. City fathers knew that the region's four-season climate was attractive to southern Arizona residents and out-of-state tourists. What the community needed were facilities and recreational sites that would make travelers stay in the area. The answer became clear: the Kaibab contained the resources for recreation and the CCC represented the means by which these resources could be developed.

On April 27, 1939, the Williams News reported that forest officials were informed that CCC Company No. 3348 would arrive at Camp C. E. Boyce on April 29. The newspaper further added that, in addition to the usual forestry work, the CCC would undertake several recreation projects. These included the construction of toilets, landing dock, and beach improvement at White Horse Lake; trail construction and campground renovations near Bill Williams Mountain; and wildlife habitat work in the Oak Tank Turkey Sanctuary.

Shortly after their arrival, 40 of the 150 CCC workers were stationed at the Spring Valley side camp. The Spring Valley crew completed additional work at the new Volunteer Mountain lookout and was involved in range management activities and road work on the eastern portion of the forest (Williams News 1939b). By June 8, the Lava River Cave picnic area was completed north of Bellemont (Williams News 1939c). By June 25, construction



Figure 17. Whitehorse Lake on the Kaibab National Forest. Photo by Rex King, October 1946.

of a new road to J. D. Lake had begun Williams News 1939d). Recreation and a highway link to Phoenix became a preoccupation with area residents during the summer. On July 13, a Williams News editorial addressing the issue of Phoenix-Verde Valley-Williams highway, commanded the community to "turn [your] eyes to the south, the present route to Perkinsville could become a straight line route from Phoenix to the Grand Canyon ... the easier the Grand Canyon is to reach, the more people will visit it". A short time later, CCC work crews began resurfacing the Williams to Perkinsville road.

The 1939 CCC work season ended on October 24. Despite what the newspaper described as "record breaking rains", CCC workers accomplished a great deal. They completed campground improvements at Bill Williams Mountain, J. D. Lake, Sycamore Rim, and White Horse Lake campgrounds. They also constructed the Lava River Cave campground, north of Bellemont, and the Garland Prairie Vista and Parks campgrounds near Parks. They built six miles of range fence, strung seven miles of new

telephone lines, improved 75 miles of forest roads, planted 40,000 pine seedlings, and spent 350 man days fighting forest fires (Anon.1939a and 1939b). Before the CCC crew was transported to winter quarters near Nogales, regional Forest Service officials informed Supervisor Mann that the company would return next year to continue their work.

what was to be the last CCC company to be employed in the Kaibab National Forest at Camp C. E. Boyce arrived on May 5, 1940. No high school bands or cheering crowds awaited this crew. Company No. 3348 returned with 178 men and work resumed quickly on trail construction, road building and water development projects. News of the camp's return barely made local headlines. The impending military conflict in Europe and the Pacific placed recreation and reforestation projections on the back burner of public attention. In all, Company No. 3348 accomplished 10,751 total man days of work on the Kaibab. Two Forest Service dwellings were maintained and a lookout tower was improved. Four miles of truck trails were maintained; three

forest monuments were erected; a landing dock and pier were constructed; six springs were improved; and 1.5 miles of fencing were installed. Also, 600 acres of timber stand improvements were conducted (Anon. 1940).

Company No. 3348 left Williams on October 12, 1940, with little attention from the community. A letter from J. Manusov, a member of Company No. 3348, appeared in the October 31 edition of the Williams News. "Our camp [located in Montana]", wrote Manusov,

is an enrollee's dream of paradise, but the friendly atmosphere of the townsfolk of Williams, with whom we were friends, can never be forgotten ... we shall miss the coffee at Central Drug, our friends, and the girls we left behind.

Manusov and the rest of his fellow CCC members never returned to Williams -- at least not as CCC workers. The United States entered World War II in December 1941. On June 30, 1942 Public Law No. 647 was passed specifying that the CCC must be totally liquidated before July 1, 1943.

Reflections on an Era: Conclusions

The CCC left the Kaibab National Forest no cross country hiking trails, picturesque lodges, or great engineering marvels. Today, most of their accomplishments either no longer exist or go unnoticed by modern forest users. Present-day forest visitors fail to realize the roads they travel were constructed by young men, most of them far from home, laboring for little more than a dollar a day. Nor do hikers often reflect upon the days of back-breaking effort necessary to construct a trail out of volcanic rock. The lake which was to be impounded behind Kennedy Dam never developed. A spring flood by-passed the dam in the early 1940s. Forest engineers also discovered that the soils behind the dam were too porous to maintain a lake. Impounded water simply drained Likewise, the Williams to into the ground. Perkinsville road never was connected to the Black Canyon highway and Phoenix. State officials decided during the 1950s that Flagstaff would be the terminus of Arizona's largest north-south highway.

The significance of the CCC era on the Kaibab National Forest is that it marked the start of a new period for the Kaibab foresters, as well as the community of Williams. The CCC era brought about a change in attitudes. Forest users, who

once opposed federal land reservations and land use regulations, began to realize the important role the government played in protecting the present and future supplies of the region's timber, grazing, and water resources. 1933, local residents believed the federal government had too great a presence in the local After World War II, area citizens economy. demanded greater action by the government to develop local forest based economies. management and local forest officers changed after the CCC years. The increased use of the forest's timber, grazing, and water resources, and the growing popularity of forest recreation, resulted in larger management budgets and greater numbers of trained personnel. Early forest rangers, local men who spent more time as cowboys and firemen than as resource managers, were steadily replaced by college-trained foresters. Early management focused upon fighting fires, counting trees and cattle and mending fences. After the CCC and World War II, forest management involved scientific forestry practices, resource planning, and recreation development.

Everyone benefitted from the CCC's presence on the Kaibab National Forest. CCC recruits received work, training, and a taste of what military life was like. Local forest officers gained acceptance and cooperation from a previously indifferent Kaibab officials were also able to community. obtain more manpower and accomplish more work than in any previous period in forest history. forest was physically improved because of work by the CCC. Forest diseases were combatted, forest fires extinguished, overgrazed range lands reseeded, and thousands of seedlings were planted. Because of these forest improvements, ranchers enjoyed grazing allotments with more grass. and improved forest service roads and truck trails allowed the local forest industry to reach previously inaccessible timber stands. timber access was critical, particularly given the increased demand for lumber brought about by and after World War II.

The work of the CCC turned the community of Williams' economic attention from a strict lumber and grazing economy to a tourism and recreation oriented economy. The lumber mill in Williams closed shortly after World War II. The post-war period was one of increased national prosperity and increased leisure time. More people travelled by automobile than ever before. People had travelled through Williams before, but usually to continue on to the Grand Canyon. The CCC helped to create the environment which made people want

to stay and spend money in the Williams area. The Williams tourist economy increased, in part, because of the Kaibab's campgrounds, picnic areas, fishing lakes, boating facilities, and scenic trails. None of these improvements could have been developed as quickly or at such a bargain to the community without the labors of the CCC.

The workers who sweat, toiled, and weathered the Depression on the Kaibab National Forest left no monuments to themselves. Perhaps if they did, the unseen, yet important, contributions they made would have never occurred. Looking back at the

recruits' first day on the forest in 1933, a reporter for Williams News wrote, "As a whole, they looked like a very green bunch of boys." Local impressions of the CCC during those early days included fear, doubt, and hope. In the final account, this "very green bunch of boys" came to be accepted and admired by their superiors and the community. They accomplished hundreds of beneficial forest and community improvements. Because of the community support and their many achievements, Roosevelt's "unemployment army" was a success on the Kaibab National Forest.

Patrick Putt, a history graduate student at Northern Arizona University, developed this essay while conducting research for a historic overview document of the south Kaibab National Forest.



Members of the first Kaibab National Forest timber survey team meeting at Ryan Ranger Station, April 11 - 13, 1910. Photo courtesy of Robert Rosenbluth. Sitting: Ranger Charles Mace, Sid Reese, Old Dad Griffin (Cook), Rosenbluth, Sup. J. H. Clark, Clerk Veru Duncan Laing, Nils Eckbo, Rangers Woodbury and Benson of the Dixie Forest, Assistant District Forester Homer Fenn, Ranger Dan Judd, Uncle Metcalf, Ranger Scott Brown, Linc Crowell and the two ladies who did the cooking. Standing: Johnny Ingram, District Forester Sherman, Jimmy Owens (Cougar Hunter) and Ranger Bill Mace Figure 18.

WILL MACE MEMOIRS

The memoirs of Will Mace are written in letter form. He wrote this letter to Gifford Pinchot, who was gathering information for a planned book on early Forest Service rangers. William Merklee Mace was born in Kanab, Utah on July 12, 1884. His brother, Charles Abraham Mace, born in 1881, also worked for the Forest Service for a short time. Will began his Forest Service career on the Kaibab National Forest, serving from April 1909 to September 1911. In that short time, he participated in several pioneering projects. These included the construction of the first range fence, an early example of range management; the first timber reconnaissance survey in the District [Region], the data from which are still useful today; and the building of Jacob Lake Ranger Station, now listed on the National Register of Historic Places. He also knew the "cougar killer of the Kaibab", Uncle Jimmy Owens.



Figure 19. Jacob Lake Ranger Station under construction in 1910.

Salt Lake City Utah. February 9, 1940

Hon. Gifford Pinchot, Washington, D.C.

Dear Chief:

It is particularly fitting that you, above all others, should undertake the sizable task of compiling the material for a history of the Forest Service and I feel honored in being given an opportunity to contribute my bit. Although I served less than a year under you as a Chief yet it seems only natural that you should carry the title perpetually because of the excellent job you did when laying the foundation for the Service and also for the influence you have exerted throughout the years which has been largely instrumental in helping it to grow into the splendid organization which it is today. Certainly no bureau of the government has had, nor could have, higher ideals of service than have been instilled into our organization since its inception.

Although not entitled to wear the badge in my present position, yet my sense of loyalty is as great, I believe, as during the twenty years when I did wear it and my strongest hope is now that friends of sufficient number and strength can be found to prevent the impending "transfer".

In retrospect it appears that the dominant factor which impelled me to apply for the forest ranger examination during the spring of 1908 was the hope of securing a permanent job at agreeable work in a land where such things were rare. A brief sketch of family history will make the situation clear.

My Grandfather, Wandle Mace, at the behest of Bringham Young, had gone from Salt Lake City to Southern Utah with other early settlers in 1861. My Father, George, was then a boy of seventeen. The climate of Utah's Dixie did not agree with grandfather and shortly after the marriage of my Father and Mother, which occurred in 1869, they all moved to Kanab. They were among the first of those who, against tremendous odds, managed to make a home for themselves in that place. It was primarily a livestock country since there were large sections which were chiefly valuable for grazing, while water for farming was very limited though the soil proved to be productive when irrigated. I was the youngest of four brothers and the two eldest had become interested in cattle and sheep raising by the time I was old enough to look for a job. Naturally, my interests were directed also toward the livestock business.

Judged by present conditions it was rather a rough and ready world we youngsters lived in although it had its compensations. I recall a day when several other boys and myself watched for a dust cloud to the south which we knew to be a herd of some 3000 beef cattle on their way to the railroad shipping point some 200 miles distant. We mounted our ponies and soon joined the cowboys trailing the cattle to follow for a few miles. I had difficulty in identifying my brother from the other riders because of the coating of dust on their month-old beards which made them look all alike. I remember also how we learned from half clad Piute lads, who lived across the creek in sagebrush wickiups, the art of making bows and arrows with which we hunted rabbits and other small game.

As I grew older steady jobs, even with livestock, as I have stated, were not plentiful but at the time of entering the Service I had managed to get a high school education and to acquire a partnership in a small herd of cows. As will be shown the cows helped to further a much greater interest.

The records will show that my appointment as Asst. Forest Ranger became effective April 1, 1909, on the Kaibab National Forest. Forest Supervisor was John H. Clark and Dan Judd and Scott Brown were Rangers. James T. Owens was employed as Game warden and lion hunter and later that summer my brother Charles joined the force as Asst. Forest Ranger.

In preparation for the appointment which I hoped to receive, I quit my job on the sawmill at Jacobs Lake and early in January 1909 had registered at the Utah State Agricultural College for a short course (8 weeks) in Forestry which was being given for the first time that year. Evidently our College ranks among the pioneers in initiating special training in this line. The course was conducted by Julian E. Rothery, Yale Forest School graduate of 1908, now of the Washington office, who did a very creditable job of introducing the class to the rudiments of Technical Forestry and Surveys. For me this proved to be very valuable training.

My service on the Kaibab continued from April 1909 to September 15, 1911, during which period I assisted on several pioneering projects. One of the most important of these was the 40 odd miles of drift fence for which, I believe, L. F. Kneipp of the office of Grazing at Washington, and later to become our District Forester in Dist. 4, was chiefly responsible. Sometime during the winter of 1908-09 Mr. Kneipp had held a conference at Kanab with local and District forestry representatives and the cattle permittees of the Kaibab, for the purpose of adjusting a range dispute between B. F. Saunders of Salt Lake City, owner of the Bar Z outfit which held permit to graze 9500 cattle, and a group of smaller owners from nearby towns whose combined permits totaled upward of 6000 cattle and horses. The small owners had complained that their permit numbers were being held down because of the overgrazed condition was directly traceable to the heavy drift of the Bar Z stock from the east.

At the conference it was agreed that the only way to successfully cope with the problem was to divide the range by constructing a fence. It was agreed the fence must run generally parallel to the main backbone of the plateau but to include certain portions of the west slope. However, it must cross all canyons in such a way that there would be a natural drift from high to low range for the Bar Z stock and thus avoid traps where they might get snowbound in late fall. Water was a paramount issue and it was carefully stipulated that the location must leave designated ponds or springs on the east side and certain other watering places on the west side. The agreement further stipulated that the Forest Service would furnish the necessary barbed wire and staples to be delivered at Marysvale, Utah, the nearest railroad point; the group of small permittees were to deliver this material at designated points adjacent to the proposed fence line while the Bar Z outfit, through its superintendent, was to do all construction work and maintain the fence in good condition for a period of five years following completion. The hauling meant trips by team and wagon varying 300 to 400 miles from Marysvale to delivery point and return.

In June 1909, Ranger Dan Judd and I were assigned by Supervisor Clark to survey and blaze the tentative line for the proposed fence which was the first large project of the kind to be initiated by the service in this section. This is where we learned the meaning of "drift" when used as an adjective to describe a fence. Dan was chief of party and I was to find that cat like

qualification of being able to find his way round in those dense timber stands come night, stormy days or what have you was very comforting and saved us extra work and trouble on many occasions. My training at U.A.C qualified me as compassman and we had along a couple of boys as chainmen and general helpers. We had saddle and pack horses and moved camps as frequently as was required by the progress we made. Where grass was short it took about all of one mans time to keep track of our hobbled horses.

At that date there was no dependable drainage map of the Kaibab and for the greater part of the distance of more than 45 miles, which was marked at that time, we worked our way through timber which, in places, formed a more or less dense jungle of mixed species such as Yellow pine, Douglas Fir, Balsam, Spruce and Quaking Aspen. For all his expert woodsmanship Dan was often puzzled to work out the correct location with respect to watering places since their situation in regard to each other was most difficult to determine. There were no vantage points from which one might survey the surrounding terrain so it had to be worked from beneath the forest canopy. As compassman I did some tall guessing at times but at that we were able to complete the survey in about three weeks and with very little backtracking. The section traversed touched roads or trials only at remote intervals and was so infrequently visited by man that when we encountered deer or wild horses while on foot the animals would seldom show alarm until they got our scent. By approaching cautiously against the wind one day I was able to walk right into the midst of a band of wild horses grazing under the Yellow Pine. When they finally became mildly alarmed they trotted slowly in a circle until they were on the opposite side but when they got the man scent they were off with a final snort of disdain from the leader, a handsome, bay, heavy maned stallion. At the time there were hundreds of these horses ranging over the Kaibab but I understand that they have almost disappeared - another sacrifice to civilization. While there they gave added charm, with the mule deer, to a Forest which will always be to me the most interesting of the timbered sections with which I have had contact. completed the drift fence served effectually to accomplish its purpose with satisfaction to all concerned up until the time that changing conditions made it no longer necessary.

One event which happened during our fence survey is worthy of mention here. When we reached the Dry Park spring at which we planned to camp we found campers there ahead of us. A party of several people in charge of E. D. Woolley of Kanab and his nephew, Gordon Woolley of Salt Lake City, were returning from a visit to the North Rim of Grand Canyon and traveling - of all things - in a couple of automobiles. These were the first motor vehicles to cross the Kaibab to Grand Canyon and the date was the last week in June of 1909.

The remainder of the year was spent on various sundry jobs all full of interest and furnishing more instructive experience. Had my first opportunity to learn something of marking timber for cutting and a system of log scaling. Also had one or two exciting hunts with Uncle Jim Owens and his pack of hounds. Whenever he had a trip to make after mountain lion into rough, isolated territory along the rim of Grand Canyon, if other duties permitted one of the Ranger force was assigned to accompany him. I was always pleased when I drew one of these assignments - as also were the other boys - because we liked the excitement and we liked to go along with Uncle Jim who had graduated from Texas cowboy into his job of cougar hunter. Always pleasant spoken but ordinarily not very talkative he would occasionally get the urge to tell stories while the camp fire flickered and I was quite content to listen as long as the stories



Figure 20. Uncle Jimmy Owens (the "cougar killer of the Kaibab) at Jacob Lake in 1920.

continued. He had covered most of the west in his sixty odd years and had had many interesting and thrilling experiences. He took as good care of his dogs as men do their children and on more than one occasion he had been known to face a wounded lion at bay with only his knife as a weapon when to use a gun from a safe distance would have meant that the dogs were as likely to stop a bullet as would the lion. Uncle Jim was guide for Ex-Pres. Theodore Roosevelt and his sons who spent about a month hunting cougar on the Kaibab during the summer of 1913. A most interesting story of this trip was published in "The Outlook" during the fall of 1913.

In January of 1910 another assignment of outstanding interest began for me when 1 was detailed to guide the crew which conducted the Kaibab Timber Reconnaissance which made history from the fact that it was the first major timber survey project in Dist. 4. There were seven members in the original crew besides myself. D. M. Lang, later of the Dist. 3 office, was chief of party with Lincoln Crowell, Nils B. Eckbo, S. S. Stewart, John E. Ingram and R. B. Taylor as crew members and Dad Griffin as cook. There were a number of changes in the personnel as the season advanced, some of these men leaving and others being sent in to replace them. One of those who spent some time later in the season was Dana Parkinson, now of the Washington Office, and a graduate of Yale Forest School, 1910. He was connected with the District and Region 4 office for some years before being transferred to Washington.

The outfit left Kanab in late January with three wagon loads of supplies and equipment, and headed for Jacob's Lake to make our base camp. When the snow got too deep for the teams we set up a tent and unloaded the supplies into it from which we transported everything the last six miles on a couple of dog sleds. Only one or two of the party had used snowshoes - Eckbo was a native Norwegian and an expert on Skis- and we had ourselves a very merry time on the first trip or two mainly because we loaded the sleds too heavily. It took a week to get the layout into Jacob's Lake and stored in the old sawmill cabins before we could get down to real business. We were compelled to work on snowshoes for about two months but we found the dog sleds made dandy toboggans for Sunday afternoon recreation.

In making our survey the grid iron system was used with actual coverage in 10% of the area. From a point near Jacob's Lake a base line was extended by transit southward along the backbone of the plateau from which we ran compass lines at right angles for checking at three mile intervals. The base line eventually reached to near the rim of the Canyon and the compass lines were run to the edge of the timbered area. As a rule we worked in pairs, one using the compass and doing the sketching while the other attended to the timber estimate. The initial point of the survey was eventually tied in by triangulation to a mile post on the Utah - Arizona state line some twenty or more miles distant.

In order to speed up the job, about June 1 1 was given a chuckwagon well equipped, with a man to serve as teamster and cook, and a crew of four local boys, with this outfit I spent the month in marking compass lines at right angles to the baseline. This plan allowed the regular crew to proceed much more rapidly with the estimating and mapping.

On July 1 1910, it was necessary for me to again take up the duties of my Ranger district. Among other things I supervised the finishing work on the two room cabin at Jacob's Lake, begun the year before, and built a combined stable and hay barn. These buildings are still being used by the Rangers. During the season a number of range improvements were completed, consisting of water development, stock trails to water, corrals and drift fences, and extended the

telephone line which, until then, had connected but two of the stations with the Supervisor's office in Kanab. With much of this work it was not merely a case of supervising the job but we all laid aside our riding gear to take up whatever tools were necessary to complete jobs when the meager appropriations proved inadequate.

Much of our time during these years was taken up with grazing work and naturally our working togs were much the same as worn by the cowmen except that the Ranger might have an O. D. Flannel shirt upon which to pin his badge. As for hats, the white Stetson with narrow brim and about a half gallon crown was preferred by most of us. The cowboy boots, Levis or khaki pants, chaps, and rope were considered indispensable equipment and we usually had a six shooter in a saddle pocket, in a chaps pocket, or strapped on the hip. When on hunting trip we usually carried a rifle on the saddle. Coyotes were rather too plentiful and occasionally we ran across the trail of a wolf. I recall the time I rode in to the Big Spring station to camp when no one had been there for some days nd upon opening the door to the old barn where we unloaded our gear I faced a mangy old coyote. That time I was glad that my 38 was where I could reach it handy.

During the summer months we seldom made the trip to town more often than every second month as it was a days ride going or coming from Ryan Ranger Station, our general headquarters. For the rest of the year we generally made the "Mail and Supplies" trip once each month. We were beginning to get the idea that we should take the regulation Saturday night, round-tub dip the same as we would do at home and the Forest officer who failed to shave each Sunday was considered very careless of his appearance. We had no mail service. The horses we used were pastured the year round except that we had some hay furnished during the winter of 1910-11, most of which was produced at Big Spring Station. We had light grain rations for the saddle horses during the winter season and since the animals were all range bred it was no particular hardship for them to rustle their forage while hobbled. We did our own shoeing, of course, and a good shoeing outfit with extra shoes and nails were always in our packs.

During the summer of 1910 we were much excited by the news that we were to have a visit from Chief Forester Graves. He finally arrived in late August or early September, piloted by District Forester Sherman, to spend a few days on the forest. When his inspection was completed he journeyed south via the Bright Angel Trail and the cable tramway which formed the only means of crossing the Colorado River between Lee's Ferry and the mouth of the Virgin River. So far as my information goes Chief Graves is the only head of the Service to visit this isolated forest.

Working with trained foresters as I had done the year previously I had not only gained some knowledge of mapping and estimating timber but I had gained a new viewpoint regarding the possibilities of my job and plans which had been very hazy at first had begun to chrystalize. By spring of 1911 I had reached the decision that if I wished to compete for advancement in the Service I would need more special training. Through the kindness of Mr. Sherman, who was very encouraging when I had an opportunity to tell him of my plans, I received catalogues from a number of Forestry schools but the Yale school was the only one that appealed to me. The catalogue stated clearly enough that a college degree was necessary in order to be eligible to enter for the two year course leading to the M.F. degree, and how I was to hurdle that one I could not see.

However, I again had a chance to discuss tentative plans with Mr. Sherman and learned that I could obtain leave of absence for a year to attend college

and if I worked during the summer I could get leave for a second year. Then unbeknown to me, he wrote to Prof. Toumey, Directory of Yale F. S., who informed me that on the recommendation of Mr. Sherman I would be allowed to register for the course but could not expect to receive the degree without first completing the prescribed preliminary work. As I could not see my way clear to get in more than two years of schooling I finally decided it would be wiser to take one year at our own U. A. C. at Logan, get back on the job during the summer following and proceed to New Haven in time to register for the fall term at the Forest School. This plan I followed through.

During the years 1910-11 I had one sawmill on my district which was cutting principally Yellow Pine (Pinus Ponderosa) and although the annual cut amounted to no more than a few thousand feet of lumber it gave me that much more experience in the handling of timber sales. It was the misfortune of the owner, John F. Brown, to have his sawmill catch fire from the boiler and burn to the ground. This happened early in September and just shortly before I left the Kaibab. And only a few days before my departure I saw a herd of 2200 head of beef steers brought into the Bar Z corrals at Jacob's Lake which is on its way to the shipping point at Milford, Utah. This was one of the last big herds of beef cattle to be brought off the Kaibab range. The following night the herd was bedded down just at the foot of the mountain and entirely out of the timber. They were restless in the open country and during the night the howl of a coyote nearby was all that was needed to cause a stampede and the riders rounded up the leaders at Kanab Creek the next morning a distance for more than 25 miles from the bedground.



Figure 21. Hauling supplies for the North Kaibab Timber Survey at Jacob Lake in 1910. Rangers fill in for dogs in pulling the sleds. The photo was taken at the Ranger's Cabin and was provided by Robert Rosenbluth.

Will Mace's letter continues with reminiscences of his Forest Service career. He attended school in 1911-12 at Logan, Utah, then continued to do timber survey in Idaho and Wyoming. In 1914 he became the Assistant Supervisor on the Manti National Forest in Utah. In 1916, Will Mace was promoted to Forest Supervisor of the Dixie National Forest, headquartered in St. George and later Cedar City, Utah. That same year he married Pauline Olson of Ephraim, Utah. They had five daughters. In the 1920s he became involved with pioneering efforts to coordinate tourism activities related to Bryce, Zion, Cedar Breaks, and the north rim of Grand Canyon National Park as both Forest Supervisor and president of the Cedar City Chamber of Commerce. His memoir ends at this stage of his career. As he alludes to in the beginning of his letter, ["not entitled to wear the badge in my present position"], he resigned from the Forest Service in about 1930. According to family members, he moved to Salt Lake City and went into business. He lived there for the rest of his life.



Figure 22. Martin Flynn demonstrates the use of lag bolt handholds on the Grandview Lookout Tree.



Figure 23. This ladder (Little Mountain Lookout Tree) is typical of the type found on the Kaibab.

Archeologists have long been looking down, and with good result. That is where the remains of past cultures, the broken pottery or rusted tin cans, are usually located. But sometimes the remnants of history are airborne rather than on the ground. Fire lookout trees are examples of such resources. They commemorate the battles won by the earliest Forest Service fire fighters (Flynn: 1990).

This paper summarizes an amendment to the thematic National Register of Historic Places nomination by Peter L. Steere (1987). It focuses on an additional property type, lookout trees, which were not considered in the original nomination.

The sites discussed here are fire lookout trees built between 1905 and 1940 on the Kaibab National Forest. Lookout trees are simple structures that provided fire fighters an expedient and inexpensive visual network high above the forest. Now a rare and fragile resource, lookout tree remains represent the earliest physical manifestation of U.S. Forest Service fire management planning at the local level. These long-abandoned facilities are now considered historic archeological sites that, despite the ravages of time, have retained their integrity and are inherently interesting to viewers.

Because Forest Service rangers were charged with the mission to protect timber from forest fires, fire detection facilities are located in timbered areas. Lookout trees are built into tall coniferous trees in locations that provide panoramic views of the countryside. These are often on ridges or hilltops, but are also in areas of low relief. Lookout trees may be located near roads, for easy accessibility during fire patrols. The setting around most trees has not changed much since the historic period, although recent timber sale activity has temporarily altered the setting of some, and modern structures, screened by trees, have been built near others.

Lookout trees are simple structures and have little variability. However, on the Kaibab they appear in two forms: with a platform or without one. These sub-types are related to function and relative importance in the fire detection network. They are discussed below.

Ladder Trees: Access to the tops of these trees is provided by wooden ladders or by spikes (also called lag bolts) driven into the side of the tree. The limbs are removed on the ladder side. and some limbs are also removed from the tree top to provide a view. These lookouts were meant only for short term, transitory use. They have no associated feature in them such as telephone line, fire finder, or platform. Simple and inexpensive structures, these lookouts were scattered in areas with low relief. Fire crews would use these lookouts to monitor the progress of a fire or during routine patrols (USDA-Forest Service 1989: 14, 15). These points would supplement permanent lookout vistas. Occasionally, ladder trees are located next to a platform on the ground which held a map board for a "fire finder" (or its predecessor, the alidade and protractor) to aid locating the fire on the map.

Platform Trees: Wooden ladders or spikes provide access to a platform built into the top of the tree. The top ten feet or so of the tree is sawn off (and often found near the tree base) and a wooden frame platform measuring about six to eight feet on a side is built into the top of the tree. The platform usually had a railing around it and a hatchway leading up to it. Features in the platform included a seat and a map board for the fire finder. Telephones were often located in the lookout tree for quick communication with a ranger station. Remnants of these features can still be seen today in these trees. Often, a nearby tent provided housing for the fire lookout (USDA-Forest Service 1989: 14, 15).

In the evaluation report for lookout towers, Steere wrote that:

"... during the survey several lookout trees were noted, but little information was collected because that study focused only on structures. As lookout trees represent the earliest surviving form of fire detection structure in the Southwestern Region, it is strongly recommended that they be recorded and photographed and that steps be taken to preserve and protect at least a sample of the surviving ones" (Steere quoted in USDA-Forest Service 1989: 51).

The Kaibab's intent in amending the original nomination is to complete its scope by adding this

missing property type and nominating outstanding examples from the Kaibab National Forest.

On the North Kaibab Ranger District, lookout trees are more common than elsewhere. A 1959 map shows the locations of 33 lookout trees. Eleven of these were field-checked. Of those, four had fallen and were determined ineligible for the National Register. The remaining seven are in good condition and will be nominated. They are located throughout the district and thus present a good geographic sample of lookout trees for the area. It is likely that some of the other lookout trees have been removed during timber sales, but some may remain.

Lookout trees on the Kaibab National Forest are significant [in terms of Criterion A, 36 CFR 60.6] for their association with 1) the development of forest fire prevention, detection, and control by the USDA Forest Service between 1905 and 1940, and 2) the conservation movement and its influence on public land management from 1905 to 1940. They are also significant under Criterion C [36 CFR 60.6] because they embody the distinctive characteristics of a type of construction built into living trees, the earliest and simplest form of fire detection structure.

The nomination "National Forest Fire Lookouts in the Southwestern Region, USDA Forest Service" (Steere 1987 ltem 8 pages 1-31) adequately discusses the context for this nomination, and need only be briefly summarized and quoted.

In February of 1891, Congress initiated a national policy of conservation when it passed the General Provision Act. It enabled Presidents to set aside public lands as Forest Reserves to halt the destruction wrought by uncontrolled development. The first in Arizona was the Grand Canyon Forest Reserve, set aside in 1893. In 1905, Forest Reserves were transferred from the Department of the Interior to the Department of Agriculture and the newly formed Forest Service. Forest Reserves were soon renamed National Forests.

It concluded a series of events begun under Franklin Hough in 1873, continued by Bernhard Fernow in the 1880s and 1890s, and ended by the efforts of Gifford Pinchot and President Theodore Roosevelt after the turn of the century to preserve and protect the forest lands of the United States. The growth of the American Conservation Movement was to continue and often take different paths from the policies of the Forest Service, but the

Transfer Act in 1905 represented an important milestone in the development of the USFS, specifically in the Southwestern Region (Steere 1987: item 8, page 3).

The first Forest Service manual for rangers, dubbed the "Use Book" stated that "... Officers of the Forest Service, especially forest rangers, have no duty more important than protecting the reserves from forest fires" (Secretary of Agriculture 1905: 65). In 1908, District Forester Arthur Ringland initiated a fire control program for the Southwestern Region (including Arizona), suggesting that a study of forest conditions and the development of a fire plan was necessary for all forests.

Inventories were conducted north of the Grand Canyon in 1909 and south of the Grand Canyon in 1910. On the north, rangers found "... vast denuded areas, charred stubs and fallen trunks and the general prevalence of blackened poles [indicating fire's] frequency and severity long before this country was explored by white men" (Lang and Stewart 1909: 17-19). Inventory south of the Grand Canyon revealed little evidence of fire (Allison 1910: 14-15).

Funding for fire control increased after passage of the Weeks Act in 1911 and the Clarke-McNary Act in 1924. These two laws would provide the basis of federal financial support for the next 50 years (Steere 1987: item 8, page 6).

"The use of fixed lookout points originated around the turn of the century and quickly expanded. The earliest form of lookout was simply a flat mapboard mounted to a post on top of a mountain with good visibility. From this point the early fire guard would spot a fire and then chase it down. Another early form of lookout was a platform mounted in a tree with slats or spikes nailed to the side of the tree to permit climbing. There early lookouts were used primarily by fire guards on patrol as observation points on their designated routes" (Steere 1987: item 8, page 3).

A two person crew consisting of a lookout and a lookout fireman or smokechaser would work fire patrol together. The lookout would climb the tree, spot the fire, and report its location via telephone or radio to the ranger station. The smokechaser would pack up his fire fighting gear and ride horseback to fight the fire. The lookout monitored the smoke in the meantime (USDA 1959).

It is not presently known when the first lookout tree was built on the Kaibab National Forest. In 1909, a platform type of tree tower stood at Hopi Point in today's Grand Canyon National Park (then a National Monument administered by the Forest Service) (Lorenz 1990). The earliest documentation for the presence of lookout trees on today's Kaibab is 1916. A photograph dated 1916 shows the Hull Tank Lookout Tree (AR-03-07-04-868) near the south rim of the Grand Canyon. A newspaper reference to another tree on Summit Mountain (cultural resource site AR-03-07-02-871) appears in the same year:

Mr. Benham has accepted a position as Forest ranger for the summer. Monday of this week, he started work on a trail and phone line to the top of Mt. Summit where he will establish a lookout station (Williams News April 27, 1916).

Judging from old maps and extant evidence, it appears that lookout trees were not extensively used on the Kaibab National Forest south of the Grand Canyon. The many mountain tops in the area may have precluded the need for lookout trees.

There is 1ess documentation for lookout trees on the North Kaibab Ranger District. According to one old-timer, lookout trees were in existence there by 1927 (Cram 1990). Historic photographs depict lookout trees in 1930. It is likely that lookout trees were built in the late 'teens and early 1920s there, as elsewhere. It is certain that lookout trees continued in use on the North Kaibab Ranger District into the 1960s (Judd 1990; Pyne 1982). It may have been the last area in the United States where lookout trees were still used. In the late 1960s, after the trees were no longer used to scout fires, the bottom rungs of many tree ladders were removed as a safety measure (McCormick, 1990)

Development of a fire detection lookout and control system depended on having good visibility from fixed points. Sensitivity maps were made showing viewsheds from various points and correlating them with fire occurrence zone maps to assist in determining the effectiveness of given lookout points. One such map was developed for the Kaibab National Forest in 1937 and is still used today.

The most active period for lookout construction in the nation was during the 1930s, when the Civilian Conservation Corps provided the manpower that the Forest Service desperately needed to upgrade their

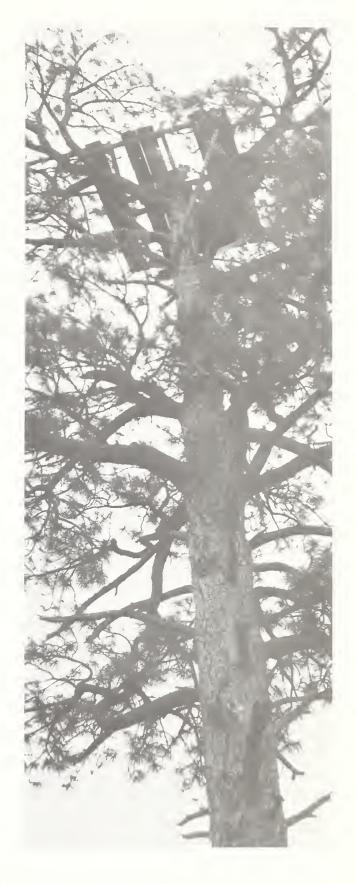


Figure 24. After 80 years, the Hull Tank Lookout tree still has a recognizable platform. Some deck boards are missing, but braces are still in place.

fire detection facilities from lookout trees and wooden towers to steel towers. Often, lookout towers replaced lookout trees, such as on Bill Williams Mountain. On the Kaibab National Forest, five lookout towers from the CCC era remain (three are listed on the National Register). In Grand Canyon National Park, the CCC built lookout trees outfitted with metal ladders. One lookout tree researcher has documented 19 such tree towers inside the park boundaries (Lorenz 1990). Another active period of lookout tower construction took place in the 1950s and 1960s, when many of the aging CCC era structures had to be replaced. Unfortunately, some lookout trees may have been felled because of safety concerns during this same period.

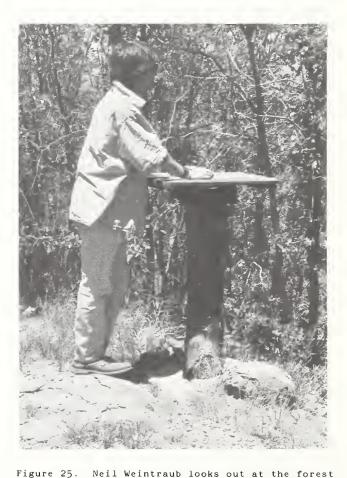
Despite the addition of permanent steel towers, lookout trees continued in use on the North Kaibab Ranger District to augment the viewshed. Numerous detection points were needed on flat terrain to adequately monitor fires. Thirty-three lookout trees appear on a 1959 map, and they were used until the late 1960s (McCormick 1990; Pyne 1982). Since then, aerial surveillance has supplanted the need for lookout trees.

The thematic nomination (Steere 1987 item 8, pages 13-18) summarizes the conservation movement and its influence in the formation and direction of the US Forest Service and need not be repeated here. The following quotations are particularly applicable, however.

The two major threats to National Forests were timber depredation and fire. The inspiration that spurred the development of the conservation movement was the exploitation of timber resources on public lands by large private lumber companies. The key to eliminating these depredations and developing sound management plans included fire protection strategies.... It is in this sense that these fire lookouts are the historic physical reminders of the methods utilized to protect the National Forests, a major goal initiated through those men and women involved in the conservation movement.... The connection between the conservation movement and fire lookouts is that fire lookouts represent an actual physical manifestation of the movement's philosophy, namely the protection of resources. By providing early detection of fires that threatened forests, fire lookouts fill this role in a clear and concise manner (Steere 1987: item 8, pp. 17. 18).

Fire lookout trees, as the earliest physical representation of the fire detection facility are significant in this context. The thematic nomination summarizes the development of fire lookout facilities, from the earliest forms, which is repeated here:

From an engineering standpoint, fire lookouts are relatively simple structures and have undergone few innovations over the years.... The earliest lookout points were simply convenient mountaintop locations with good visibility which could be visited by fire patrolmen on their assigned routes. The first type of fire detection devices constructed at some of these sites was a simple alidade and protractor placed on a tree stump, post or rock so a precise bearing could be obtained (Figure 25). Judging from the photographic evidence, some of these temporary locations were utilized into the early 1930s, and they later became the sites of permanent lookout structures.



over the mapboard at Summit Mountain. The young trees have grown up since Ranger Benham set this post in concrete in 1916.

At about the same time (circa 1905 - 1920), lookout trees appear. In areas lacking a clear mountain top to set up a protractor and alidade, a lookout tree was utilized. A tall tree was selected that would afford a good view and the top of the tree was modified to support a crude platform. Access was provided by spikes driven into the side of the tree or by wooden ladders. Usually not permanently manned, lookout trees were probably utilized most commonly by the fire patrolman as he made his rounds of the district. They were also utilized in lower elevations to obtain a quick observation point when a more permanent lookout could not provide adequate information. Fire crews may have used lookout trees to monitor the progress of a fire or watch for spotfires. In some cases more elaborate

platforms were constructed on the tops of trees and a small cabin built nearby which suggests more permanent use. Lookout trees are frequently found in the vicinity of modern day lookouts, indicating long-term use of the site for fire detection (Steere 1987: item 8, page 21, 22).

As a distinctive early form of fire detection structure, lookout trees are significant under this criterion.

Fire lookout trees are interesting, if often overlooked, historic sites. They are silent sentinels of a time when the Forest Service was just beginning its efforts to control wildfire. They stand, perhaps, in testimony of the brave men who used them during those early days.



Figure 26. This view awaited the brave souls who would climb to the top of a North Kaibab lookout tree. This one was photographed in 1937 by Charles Cunningham.

PHOTO CREDITS

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- Figure 1. Courtesy of Charles G. Wright.
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- Figure 18. Courtesy of Robert Rosenbluth.
- Figure 21. Courtesy of Robert Rosenbluth.

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